Lectures
ON
QUESTIONS IN OPHTHALMIC SURGERY.

Delivered at the Royal College of Surgeons,

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LECTURE I.—PART I.

OPHTHALMOLOGY IN ITS RELATION TO GENERAL SURGERY.

MR. PRESIDENT,—The first duty of any Fellow of this College, who, by the favour of the Council, has been permitted to undertake the task which devolves upon me to-day, must surely be to give utterance to his deep sense of thankfulness for the signal honour which has been conferred upon him. On the present occasion, Sir, this duty is more than usually imperative and binding; because the circumstances which call it into existence are in themselves a departure from precedent, and are a departure of such a kind that the honour is not limited to the individual who receives it, but extends also to the class of which he is an unworthy representative. The Hunterian Professor may often have been one whose general eminence in our art has, to a certain extent, been overshadowed by his pre-eminence in some chosen field of labour; but, I believe, the office has never before been held by any surgeon whose hospital and private practice were alike limited to a single department. I venture to think, therefore, that I stand here to-day as in some degree a representative of specialism and of specialists; and on this ground I shall hope to be pardoned if I devote a short time, by way of preface, to the consideration of special practice from the point of view of those who follow it; and if I endeavour to show under what circumstances, within what limits, and for what reasons, it should either be fostered or discouraged. The problem that these few words convey is one which presses for solution; for the prevailing tendency to the multiplication of departments of practice, and to the consequent multiplication of hospitals which are designed to afford relief to the diseases of separate organs, if it be not essential to a division of labour which has been rendered necessary by the progress of science, can hardly be otherwise than hurtful, alike to the profession and to the public at large. Whichever it may be, it is of high importance that its true character should be clearly understood, and that the general policy of the profession should be governed accordingly.

The grounds on which specialism commends itself to patients, and is thus, in a certain sense, forced upon some who would not adopt it willingly, are so simple that they are almost self-evident. The shortness of time, and the limitation of the human faculties, are only too well known to all of us; and from these data it is assumed that the average intellect cannot be expected to embrace the whole circle of the healing art, but that it must be content, especially if it aims at any high standard of excellence, to confine itself within the boundaries of a single segment. The somewhat arbitrary division between medicine and surgery, logically indefensible although practically convenient, offers to the public an apparently plausible basis for specialism—a basis which seems to them to be only legitimately extended by the process of mapping out the body into several distinct domains, each of which is to be placed under the charge of a separate order of practitioners. It would be impertinent, before such an assembly as this, to dwell upon the absurdities of what may be called the popular view of the subject; but it may be not altogether useless to seek to direct your attention to the twofold influence upon medical knowledge and practice, to the beneficial and to the hurtful influence, of even that form of specialism which, by common professional consent, is held to be legitimate, or even necessary. The time at my disposal would not permit me, even if the attempt were desirable, to enter at all into the history of the origin of the present partial separation of ophthalmology from other portions of the healing art; and I must be content to begin my retrospect at a period to which my own memory will reach back. In 1849, when I entered as a student at the London Hospital, Sir Thomas Watson had already published those lectures on Medicine which, even when regarded by the light of subsequent discoveries, must always form an imperishable monument to his fame. Most of those who hear me will remember how forcibly he recommended the study of the diseases of the eye to his pupils; telling them that the organ, by reason of its accessibility to examination, and by reason of the transparency and of the variety of the structures entering into its composition, might be looked upon as a legible epitome of the human frame and of its maladies. He used the phenomena of conjunctivitis to illustrate the course of inflammation of the mucous lining of the bronchial tubes, and the phenomena of iritis to illustrate the progress of pleurisy. Dr. Latham, and, in this College, Mr. (afterwards Sir William) Lawrence, had taught similar doctrines; and, even then, before the discovery of a means of inspecting the interior of the eye had arisen to render the truth of these doctrines as obvious as at present, they were, at least in theory, very generally accepted. But, in practice, the means of instruction were lamentably deficient. During my own studentship I never saw in the hospital a single case of eye disease; and the absence of living examples greatly diminished the usefulness of the lectures, part of the general course on surgery, which were devoted to the subject. The pupils who desired a more extended knowledge of ophthalmic maladies than the hospital would afford were advised to seek that knowledge at Moorfields; but it was scarcely possible to do so until after the curriculum had been completed and the ordinary examinations passed. When this was done, the demands of real life often became pressing, and Moorfields was too commonly left unvisited, except by those who were forced thither by the regulations of the public services. The general result may be illustrated by a single example. In the summer of 1856 I was stationed at Eupatoria, in the Crimea, together with some half-dozen other young men, who all held local rank as staff-surgeons in the British army, and who were all capable of tying an artery or of setting a fracture. I had the misfortune, as I then thought it, the good fortune, as it afterwards turned out, to be attacked by smart inflammation of one eye. I had no conception what was the matter with me, or what would be its probable issue; and among my colleagues there was not one who was any better informed than myself. I realised, for the first time, that absolute ignorance about eye disease was disgraceful, and determined that, when I returned home, I would not be content with a barren repentance, but that I would also endeavour to amend. To the pursuit of this resolution I am indebted for the privilege of addressing you to-day.

In the meantime, Sir, while such was the state of general professional acquaintance with ophthalmic subjects, there were a few men whose attention had been early called to them by special opportunities. It was the misfortune of these men, by reason of the prevailing indifference to their department of practice, that they were not stimulated in the direction of truly scientific work by the force of an enlightened professional opinion; and partly on this account, with some notable and honoured exceptions whom it would be superfluous to name, they developed a remarkable tendency to expend their mental energies in the invention of hard words—words the meaning of which was by no means self-evident, and which were not always intelligible even when they were explained. In those days, more than one treatise upon eye disease was furnished with a glossary of terms, such as we may often find appended to a collection of ballads written in a provincial dialect. The protrusion of a minute portion of iris through an aperture in the cornea was called "myocephalon." Inflammation of the retina, at that time only a conjectural condition, was called "amphiblestroiditis," although amphiblestron, instead of being equivalent to *rete*, signifies a large seine or draw-net. Perhaps the worst coinage of all was a word of no less than twenty-nine letters, "dacryocystosyringokatakleisis," which was employed to denote an operation for the cure of obstruction of the tear passage. There can be no doubt, I think, that the portentous vocabulary from which the foregoing examples have been culled must have furnished an apt illustration of

Dr. South's happy phrase, "the terrible imposture and force of words," and that it must have exercised a most deterrent influence upon a large number of medical practitioners and students. There surely needs no evidence that those who framed it must have been incapable of working in a manner calculated to increase true knowledge. It is our fortunate lot to have survived to a time at which there is a more just appreciation of the relative values of words and things.

When the late Mr. Charles Babbage invented the ophthalmoscope, and was so unfortunate as to submit his invention to an adviser who failed to perceive its value, the dawn of a brighter day was at hand. Four years later, Helmholtz repeated the invention in a slightly different form; and Ruete, soon afterwards, reproduced Babbage's original instrument, by which that of Helmholtz has long been superseded for most purposes. More fortunate than our countryman, Helmholtz and Ruete cast the fruits of their labours upon fertile ground, which has yielded a harvest of unexampled abundance. Partly because the instrument was first made known in Germany, and partly, perhaps, because the state of medical education in that country offers many facilities for the prosecution of original research, it was in Germany that the first important results were obtained. The English specialists, with certain exceptions, approached the ophthalmoscope with much timidity, and were still restrained by fears about the possibly hurtful consequences of its illumination, when the Germans had already laid down the chief outlines of the new territory into which they were admitted. The instrument, moreover, required for its intelligent employment a certain knowledge of elementary geometry; and, as this knowledge forms with us no necessary part of preliminary medical education, it chanced to be conspicuously absent in the case of some of those whose opportunities of doing ophthalmoscopic work were most extended, and to whom, consequently, the profession were entitled to look for the earliest intelligence about the new method of research. The question whether the image of the fundus oculi was erect or inverted was gravely discussed without any apparent knowledge of the conditions which would produce one or other of these states; and sometimes as if it were a matter which could only be settled by a process of ingenious guessing. For a long period, in this country, the literature of the subject was unpleasantly fragmentary and chaotic, and even now, as a sort of survival of that period, there lingers a belief that the ophthalmoscope, which is really the most simple of all instruments of physical diagnosis, is something recondite in principle and difficult of application in practice. I regret to add that the influence of this most pernicious error is still very manifest in many of our schools of medicine.

In the meanwhile, the actual pioneers of ophthalmoscopic research had made discoveries which revolutionised the pre-existing notions with regard to many of the diseases of the eye, and which, at the same time, cleared up the obscurity which had enveloped the nature of many of its functional defects. The diagnosis of cataract, previously very doubtful and obscure, was placed upon a basis of physical certainty, from which all doubt was for ever after excluded. The nature of the conditions generically termed Glaucoma was ascertained, and the way was thus opened for their successful treatment. The impaired vision of Bright's disease and of other maladies, which had formerly been attributed to the imperfect nerve-action excited by depraved or poisoned blood, was shown to be dependent upon physical changes in the retina; and the discovery threw new light upon many analogous conditions. The states collectively called Asthenopia, or weak sight, which had been regarded as incurable, were traced to faults in the shape or symmetry of the eyeball; faults which generally admit of complete correction by spectacles or by other optical appliances. The name "amaurosis," the most typical example of a word made to do duty for a fact, disappeared from ophthalmic literature; and the forms of blindness in which previously, to use Walther's poor pun, the patient saw nothing and the surgeon also saw nothing, were traced to a great variety of previously unknown or even unsuspected morbid changes. The stimulus afforded by the ophthalmoscope was by no means confined to the conditions for the elucidation of which it was required, but extended also to every department of eye disease; so that not only were all ocular phenomena observed and noted with an exactness never before attempted, but new operations and other new modes of treatment were devised and practised almost daily. On every side the old order of things was changing, giving place unto the new; and the feverish activity which prevailed may be admitted to have produced innovations which were not always improvements. Notwithstanding this, it cannot be doubted that medical science gained enormously, and that the aggregate result has been in the highest degree advantageous to mankind.

Together with these benefits, however, there sprung up two beliefs which seem to me to be alike erroneous and mischievous. The great progress of ophthalmology was by many attributed to specialism; that is, it was supposed to be a result, and even a natural result, of division of labour, or of the exclusive devotion of many minds to a single branch of the art of healing. Next, while the public were being thus confirmed in their impression that none but specialists had studied the diseases of the eye, and that general practitioners need not even be expected to study them, medical students were somehow led to believe not only that ophthalmology was exceptionally abstruse and recondite, but also that it was growing so rapidly as to be in a state of transition, and that they might wait until it became more settled before attempting to understand it. The authorities of the various schools of medicine did their best to dispel this last delusion, by establishing departments for instruction in the subject; but as long as their efforts in this direction receive no systematic recognition from licensing bodies and from boards of examiners, it can hardly be expected that they will be rewarded by any remarkable measure of success.

For my own part, Mr. President, instead of believing that the modern progress of ophthalmology is at all a result of division of labour, I look upon it as having been the necessary consequence of the sudden acquirement of a new and complete method of research; and I am fully convinced that, instead of this progress having been promoted by specialism, it has been retarded by the influence of specialism in diminishing the number of labourers in the field, and in diminishing the opportunities of those labourers to regard the facts before them from a standpoint of general pathology. A good example of this is furnished by the clinical history of many of those forms of blindness which are produced by atrophy of the optic nerves. Oculists had long been familiar with cases in which sight slowly faded away without assignable cause; and in many of such cases it was soon discovered by the ophthalmoscope that the optic nerves were blanched and wasted, or were converted into little more than connective tissue. Post-mortem examinations showed that such changes were sometimes associated with the presence of syphilitic or other intracranial tumours; but more frequently the blindness was not attended by any definite symptoms, nor did its causes appear to have any tendency to shorten life. As long as the investigation remained in the hands of specialists, who were not consulted until the sight had become impaired, nothing was known of nerve atrophy until it was well established; and even so sound a thinker and so acute an observer as Von Graefe devoted much time to fruitless endeavours to clear up the nature of a condition which he had no opportunities of tracing back to its earliest stages. Nerve atrophy was regarded, by him and by others, as an ultimate fact; and it was only when physicians began to use the ophthalmoscope in all cases of head affection, as a means of seeing the circulation of an organ structurally continuous with the brain, that atrophy was discovered to be a common consequence of inflammation or swelling which was originally limited to the connective-tissue elements of the nerves, and which therefore might exist in a very marked degree, and might give rise to ultimately destructive changes, without at first in any way affecting the sight. The occurrence of a so-called neuritis, as a common antecedent of optic-nerve atrophy, was made known to specialists by physicians who were not specialists. I can entertain no doubt that the systematic use of the ophthalmoscope in medical and surgical practice, without any direct reference to the state of vision, would lead to many other discoveries of a similar kind, and would greatly tend to connect the early stages of many forms of eye disease with a variety of constitutional changes. As long as this means of investigation is left exclusively, or even chiefly, in the hands of men who are consulted only about defective sight, so long will the real nature and causes of many of the changes by which de-

fective sight is produced be left to reward the labours of a future generation of practitioners.

It is worth while to remark, in this connexion, that perhaps the most important and remarkable surgical discovery of modern times—the discovery that certain affections of the cornea are due to inherited syphilis, and that they are in most cases associated with readily recognisable external signs of the inheritance—was due to a surgeon who, while better informed upon many special subjects than the majority of specialists themselves, has yet never allowed himself to be confined to any single branch either of study or of practice. Mr. Hutchinson's genius comprehends all surgery, and, like that of Goldsmith, it touches nothing which it does not adorn. His brilliant example affords demonstration, if any were needed, that the most complete mastery of the ophthalmology of the present day is at least not incompatible with an equal mastery of other branches of our art.

It would be preposterous to urge, however, that ophthalmic specialism is wholly without advantage. It is not given to all men to possess a widely embracing mental capacity, and thus it may well happen that some may do respectable work as specialists who would be unequal to the burden of wider responsibilities. Again, I entertain no doubt that it is, on the whole, advantageous to the public that the more important of the operations upon the eye should be committed to a limited number of hands. In the first place, in these delicate operations, and more especially in that for the extraction of cataract, it is scarcely possible to over-rate the value to the surgeon of having had a very large experience, such that he may be practically familiar with every complication which may arise in the course of his proceedings, and may be able to meet every such condition almost instinctively, and without hesitation or delay. Next I think that, for most persons, an equal proficiency in ophthalmic and in general operations is not attainable, the tendency of each being somewhat to spoil the hand for the requirements of the other. The habit of making incisions, the length of which has to be expressed in millimetres, can scarcely fail to engender a liability to be niggling over larger matters; and the freedom of hand, which is an important element of success in dividing the common integument, would often be disastrous if it were exercised upon the cornea. Moreover, as a last scientific basis for the advocacy of specialism, it is unquestionable that there are certain niceties of practice, alike in methods of investigation and in methods of treatment, which require the devotion of much time before they can be fully mastered, which have their legitimate uses in consultations upon difficult cases, and which would not come into play with sufficient frequency in general practice to render it worth the while of the majority of surgeons to acquire them.

But, altogether apart from science, there is yet another reason for the maintenance of ophthalmic specialism, and one which should perhaps take precedence of all others. There is an old story of a party of villagers who waited upon a Lord Chamberlain soon after a coronation, in order to explain why they had not rung their church bells in honour of the event. They feared that the newly-crowned sovereign would suspect them of disloyalty, and they declared that such a suspicion would do them great injustice, since they were provided with no less than twelve good reasons for their apparent neglect. To hear these reasons the Lord Chamberlain did seriously incline, but he stopped the spokesman after the first of them, and assured the deputation that his Majesty would be perfectly satisfied with that one alone—it was that they had no bells in the parish. In like manner, it might be sufficient to urge, in defence of ophthalmic specialism, that the public, whose servants we are, will have it so, and that we are bound to obey them. None the less, I apprehend, should we try to obtain clear notions of the effects and tendencies of their requirements.

Now, while I admit, quite freely, that ophthalmic specialism has the advantages which I have already stated, that it is conducive to the attainment of operative dexterity, and also to the attainment of a great deal of very minute knowledge about various matters of different degrees of importance, I yet bring against it the indictment that, as hitherto suffered to exist, it tends to render a large number of students and practitioners neglectful of ocular maladies. If this be so, it follows that it must be prejudicial in a twofold manner: first, by depriving ophthalmology of the services of many workers, who would be likely, more or less, to throw light upon some of its dark places by collateral observation; and, secondly, by depriving general practitioners of the aids which an adequate knowledge of the diseases of the eye would often afford to them in other departments of their calling. In order that we may estimate these charges at their true value and significance, it seems that we should first ask ourselves what are the precise claims of eye disease upon the general attention of the profession.

With reference to this part of the subject, it is perhaps hardly necessary to speak at length of the importance of the visual function. It will be admitted at once, and as a self-evident proposition, that this function holds the very first place, as a source of human comfort and welfare, among all those which are not immediately necessary to the preservation of life. To be deprived of it, to the great majority of mankind, would be to be condemned to a state of poverty and dependence, and to lose a very large proportion of the most highly prized enjoyments of existence.

Next to the importance of the function, we may consider the number and variety of the risks to which it is exposed. Some years ago, I had occasion to compare the numbers of the patients who were treated, in hospitals, for ophthalmic and for other maladies; and I found that the ophthalmic cases, numerically regarded, constituted about one-twelfth part of the whole. Moreover, there were then twenty-four counties which contained no ophthalmic hospitals, although they contained nearly half of the extra-metropolitan population; and, on the whole, I arrived at the conclusion that patients suffering from diseases of the eyes, and treated either at ophthalmic hospitals, or at the ophthalmic departments of general hospitals, amounted to about one in every eight or nine of the hospital patients of England, whether these sought relief for medical, for surgical, or for other so-called special maladies. Hence it would appear that the profession generally, to the extent to which it fails to treat ophthalmic affections, suffers one-ninth of its opportunities of being employed to lapse into the hands of a comparatively small number of practitioners.

Approaching the subject from another point of view, some curious statistics have been compiled by Drs. Zander and Geissler, in illustration of the liability of the eyes to sustain injury. They assume that the mean superficies of the human body is about fifteen square feet, and that the mean superficies of the orbital opening is about 180 square lines, from which it should follow, if all parts were equally exposed to injury, that injuries of an eye would bear to others the proportion of about one in 600. As a matter of fact, the actual proportion, as far as it can be ascertained, is more than twenty times as great, or about thirty-six in 1000. It need not be said that no estimates of this kind can be otherwise than approximative, but it is highly probable that any sources of error which may underlie them will tell equally on both sides of the account, and will leave a very near approach to the actual facts of the case. It may certainly be assumed, both as regards disease and injury, that every practitioner whose work is at all remote from any great centre of specialism must expect, and therefore should be fully prepared to encounter, a large proportion of ophthalmic maladies in the course of his daily practice.

AN ALTERNATIVE OPERATION FOR VESICO-VAGINAL FISTULA.

BY C. F. MAUNDER, F.R.C.S.,
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CAROLINE A——, forty-one years of age, the mother of eleven children, was delivered of the last about twelve months ago, by means of instruments. Inability to retain the urine has existed ever since. Recently Mr. William Powles was consulted, and found the patient to be the subject of a vesico-vaginal fistula. By his advice surgical aid was sought, but operative interference with the fistula was declined by three surgeons who saw her. Ultimately I was consulted, and found a large opening in the floor of the bladder the size of a five-shilling piece, while the surrounding structures were tense and cicatricial. The

patient's condition was naturally sufficiently wretched, and she had scarcely dared to venture out of doors since her confinement. I declined to attempt to deal with the fistula, but proposed to close the vaginal outlet in order to stop the existing incontinence of urine.

The records of this operation are scanty, but the author of one of the text-books on surgery says he has performed it twice "with good success, two or more operations being required."

It is intelligible that the chief obstacle to union of the rawed surfaces would be the accumulation of urine in the vagina tending either to irritate or to burst asunder these. To obviate this accident, and a repetition of the operation, I adopted a plan similar to that of puncture of the bladder per rectum in the male.

Operation (May 4th).—This consisted in dissecting off a thin layer of mucous membrane, at least an inch and a half in depth, of the outlet of the vagina, a large catheter being retained in the urethra, whilst the under surface of this was being pared. Quill sutures were used as in the operation for ruptured perineum. As soon as all bleeding had ceased, the recto-vaginal septum was penetrated just behind the rawed surface, obliquely from before backwards with a trocar and cannula introduced per anum. The trocar was withdrawn, and a winged catheter having been passed through the cannula, the latter was removed, and the end of the catheter left in the vagina. The sutures were now twisted, and the operation was completed. Half a grain of opium was ordered to be taken night and morning.

May 7th.—Progress very favourable. The bed is perfectly dry, the urine flowing freely through the catheter, which projects at the anus. Removed the sutures.

9th.—This morning, the catheter having become accidentally plugged, the urine was retained, and the patient, instead of sending for Mr. Powles, sat on the pot de chambre and strained to make water, and with the effect of forcing apart the feebly united surfaces. On this day, at my usual visit in the afternoon, I had intended to remove the winged catheter, expecting to find that it was no longer required. I now determined to give up all idea of primary union, and to trust to healing by granulation. To secure this I deemed it desirable to reintroduce sutures and also to replace the soft by a metallic tube in the rectum. Accordingly, after giving the patient a few days' rest, and getting the bowels open, this was done on May 15th.

26th.—Removed the sutures.

30th.—The tube was removed early this morning, and the bowels were freely relieved by an aperient and an enema.—5 P.M.: The bladder has not been emptied since the morning, but the new septum is water-tight, although the desire to micturate is great. The water is to be drawn off periodically per meatum, and, if desirable, she will be taught to use the catheter herself.

Remarks.—A short silver tube (No. 14 catheter size) answered the purpose of conducting the urine better than the smaller and soft instrument, as it never became plugged, although on removal there was a thick coating of phosphates on its interior. I was somewhat anxious lest a permanent fistula might result from the use of this tube, but there was at no time any evidence of the passage of urine into the rectum, neither has this occurred since the removal of the tube. With the hope of preventing this, I, on each occasion, perforated the recto-vaginal septum *obliquely*. I ought also to state that I introduced the silver tube through the septum by means of a Thompson's bivalve tracheotomy lancet. Throughout the treatment the patient experienced no inconvenience whatever from the tube in the rectum, and the position she was thus able to assume was a most independent and comfortable one.

P.S. June 3rd.—To-day I was informed that a few hours ago the patient found that her water again dripped from her. On inquiry it appeared that the nurse had used the catheter as usual, and soon after the patient noticed that she was wet. On examination I found a small opening large enough to transmit a No. 6 catheter leading into the vagina, just below the position of the meatus, and doubtless made by an improper use of the catheter. Notwithstanding the annoying circumstances connected with the case, I believe puncture per recto-vaginal septum will prove of great value.

Queen Anne-street.

ACUTE GENERAL HERPES.

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As the above-named disease is exceedingly rare, the following clinical account of a well-marked case may not be without interest to many. Some authors do not even mention its existence; while Dr. Tilbury Fox remarks in passing that Dr. Coutagne, of Lyons, has recorded cases. The following notes are only those taken hurriedly at the bedside:—

Mr. B——, aged seventeen—subject to urticaria, and having a mitral systolic murmur,—while out in the rain on Oct. 17th, 1874, got wet, and stood in front of the fire, with his clothes on, to dry them. He says he was only wet up to his knees.

On Oct. 18th and the following days, had aching all over, but especially in the limbs; did not feel well; had no catarrhal symptoms.

Oct. 22nd.—Aching very much worse; so bad was it that I anticipated an attack of rheumatic fever. At 5 P.M., I was asked to see him again, and found him with a pulse of 120, and a temperature of 102°; skin hot and burning; acute pain in diaphragmatic region, which proved only neuralgic, and not inflammatory, as I expected it would have done. He had a hot bath, and went to bed.

23rd.—Awake all night; very restless; pain at diaphragm continued.—At 2 P.M. a redness of the skin was seen, in raised patches, all over the body, somewhat like urticaria; face and hands swelled; skin very irritable, not itching, but sore and tingling; could scarcely bear the bedclothes to touch the skin anywhere. On looking more closely, the red inflamed patches were raised in small vesicles in clusters, not all over equally alike, but in certain parts, in characteristic crops of herpes vesicles filled with clear fluid, these occurring especially well-marked on the back of the hands, elbows, knees, feet, and several clusters of a dozen each on the walls of the thorax.

24th.—Many more of these vesicles in clusters all over the body in various parts; also on the face, beside the nose, but not on the lips, and occurring, too, all over the hairy scalp and forehead. Those vesicles seen yesterday are much more distended with clear fluid. There are no vesicles on the palms of the hands, but only red patches as large as a threepenny piece. The chest-walls are smothered with vesicles in small crops, but in no case do the crops seem to follow the distribution of nerves; they are most irregular in their situation. Isolated vesicles only on abdomen, back, and thighs, scattered here and there, but the redness, bright scarlet, is so extensive as to form almost one continuous red surface. On the soles of the feet are red patches only, but on the dorsum a great many vesicles. On the inside of the mouth, on the tongue, soft palate, and well into the pharynx, vesicles are seen.

25th.—Sweating profusely where the skin is not covered with the redness or crops of vesicles, but as this normal skin only exists as interstices between these patches (so full are they), it presents a very curious appearance. Therefore the skin presents the following character: red patches with crops of vesicles on them; red patches dry on surface; and normal skin threading its way between these, quite wet with perspiration. The redness is beginning to fade, and the vesicles are shrinking and several bursting, leaving no scab, but only the cuticle that had been filled with fluid, lying lax on the surface and dried.

26th.—Still more fading and absorption.

28th.—Most of the vesicles gone, and the redness become darker in colour. On the back, where there had been no vesicle detected—that is to say, well raised, bright and glistening from the fluid,—I could distinctly see and feel not only raised red patches, but on these patches small pimples but not blebs, doubtless owing to a small amount of fluid under the cuticle. The red patches have assumed such peculiar shapes that it is quite impossible to describe them, but they make the skin look anything but as it should.

29th.—There are fresh crops of vesicles on the chin and beside the nose, also some on the ear and inside the nose, not noticed before; some still visible on the soft palate and

tongue. There has also been a vesicle at the end of the penis, and there is now a crop of fresh-looking vesicles on the scrotum. The fluid from the vesicles is alkaline and clear. The red patches are becoming smaller and darker, and much resemble the fourth day of the rash of measles, so blotchy are they. On looking closely at what have been the larger red patches, they are disappearing in rings, exactly resembling the way that ringworm grows—that is, they become brownish-yellow in the centre, with a reddish ring encircling it.

30th.—A few fresh vesicles on the chin and nose, which resemble in appearance the ordinary herpes from cold, but no vesicles at all on the lips. Has severe pain again in abdomen.

Nov. 3rd.—Skin desquamating all over, more or less, in large and small scales. The patches with yellowish centre and red ring surrounding are very marked, but they are all manner of shapes and sizes. Fainted while at night-stool; slept much after.

6th.—Skin still peeling; convalescent.

His treatment was salines at first, with Dover's powder to relieve the pain; subsequently he had the mineral acids with bark, and then quinine. This illness, together with the mitral disease, was the cause of a very great debility, extending over some months.

CASE OF CLEFT HARD AND SOFT PALATE, OPERATED ON BY LANGENBECK'S METHOD; RESULT PERFECT.

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DAVID S——, aged twenty-two, was admitted to the Western Infirmary Nov. 26th, 1875. There was a congenital cleft in the palate involving the whole of the soft and half of the hard palate. The anterior end of the fissure was quite rounded, and the margins of cleft in the hard palate were three-quarters of an inch apart. The tips of the bifid uvula were drawn asunder by the palatine muscles.

The operation was performed after the method introduced by Langenbeck, closure of the hard and soft palate being accomplished simultaneously. The patient, not being put under the influence of chloroform, was able to give great assistance, by holding his head at a proper angle and occasionally stopping to rest and wash his mouth. From the help of the patient the proceedings were much more rapid and satisfactory than usual.

I first carefully made raw the entire edges of the gap by cutting off a thin slice of tissue from the hard palate, to the tips of the uvula, on both sides, taking care that the raw edge was continuous throughout. I then made an incision down to the bone, in the roof of the mouth, close within the alveolar process, extending from the hamular process forward to near the incisive foramen. Then with a blunt periosteal elevator of a hooked form I stripped the soft tissues, including the periosteum, from the palate processes of the maxillary and palate bones, and the flap so separated hung down like a curtain from the roof of the mouth, but of course supported by its attachment in front and behind. This was done on each side. The posterior part of the cleft, however, still remained too far apart to allow of approximation without considerable tension, so I relieved this by making incisions through the soft palate on each side, as in Dieffenbach's operation. The edges of the cleft could now be drawn together throughout the whole extent. Six silk threads were introduced by the ingenious method introduced by Sir William Fergusson, and finally by these, fine silver wires were drawn through and tied. At the end of the operation the gap was seen to be closed throughout in a most satisfactory manner.

On the eighth day the silver sutures were removed, and the edges found to be firmly adherent.

The patient was kept in the hospital for some time longer in order to see that the granulation of the side wounds should not reopen the cleft.

Two months after the operation the palate was firmly closed throughout its whole extent. Already patient felt the difference in swallowing, and the improvement in his articulation was manifest. In fact, when he paid proper attention he could speak in such a way that his former deficiency was scarcely recognisable, and there is no doubt that by a little practice he will still further improve.

The operation, so far as regards the union of the cleft, and the result, both on swallowing and speech, is the most successful in my experience, and leaves little to be desired.

Glasgow.

ON THE ORIGIN OF INFANTILE SYPHILIS.

BY ROBERT CORY, M.B.,
ASSISTANT OBSTETRIC PHYSICIAN TO ST. THOMAS'S HOSPITAL.

IN THE LANCET of March 25th, I saw, by the report of Dr. Greenfield's speech at the Pathological Society, that he had generously mentioned my name in reference to a suggestion I had made to him in conversation upon infantile syphilis. I should not at present have ventured to give greater publicity to this theory if my name had not been mentioned in connexion with it, because for substantiation it requires more accurately recorded facts than I am as yet able to bring forward.

When infantile syphilis was first recognised, it was very naturally attributed to direct inoculation at the time of birth. Afterwards, however, when it was found that, except in a few instances, the mother was not suffering from local sores at the time of birth, another explanation was offered, which is still very generally held—namely, that the disease was inherited like other hereditary diseases, and that consequently it was communicated to the offspring at the time of conception. A corollary followed from this—namely, that the diseased fœtus might indirectly convey to the mother the disease of the father. Now, looking at the facts and arguments in support of these views, they seem only partially to support it.

Let us consider the cases adduced first. They may be divided into two classes:—1st. Those where, the father having had syphilis, the mother gives birth to a child which afterwards suffers from the disease, but she herself remains absolutely free. 2nd. Cases where the mother, during pregnancy, without any discovered primary inoculation, suffers from syphilitic symptoms. In some of these cases the woman is said to suffer during each pregnancy, but remains well in the interval.

The alleged cases of the first class are the most important, for, if true, they are conclusively in favour of the received theory. M. Diday mentions several of these in his work on "Infantile Syphilis," but one which he details is sufficient to throw suspicion on all, for it indicates how a fallacy may arise, and also shows how facts may be bent to theories. The case is this. "The wife of a syphilitic man gave birth to a child which became syphilitic. The woman, however, suffered from no symptom whatever, unless a small patch of granular redness on the fore part of the neck could be said to be such. This woman becoming a widow, married a healthy man, but again by him gave birth to a syphilitic child." M. Diday supposes in this case that an impression was left behind on the woman by her first husband, which was capable of infecting her subsequent children, in some such way, I suppose, as the subsequent foals of a mare once covered by a zebra are sometimes impressed with the markings of the zebra. He does not, however, admit that she had herself contracted syphilis, because she presented no symptoms, and he argues against the small patch of redness being such. Here he thinks that it was possible for a woman to be free from syphilis herself, yet to give birth to a syphilitic child, the result of a former husband's impression, the real father being healthy. This assumption is directly contrary to the fact observed and stated by Mr. Hutchinson, "that he has never known a mother infected by suckling her syphilitic child;" evidently *because* she is protected by a previous attack of the disease. We see, therefore, of how little value the first class of cases become.

With regard to the second class of cases, I think an explanation can be found more conformable to facts than the present interpretation, and it is this: That in all these, where the mother shows symptoms of syphilis while carrying her child, and afterwards gives birth to an apparently healthy child, which is subsequently attacked, she infects her offspring at birth by her blood; for we can readily suppose that, at the time of the separation of the placenta, before the fœtal circulation has ceased, some of the mother's blood may be swept into the fœtal circulation along the umbilical vein. If this be so it will also explain why the liver is so early and seriously affected in infantile syphilis. The only difficulty left is the question—How is the mother affected if not by the fœtus? In answer to this I will offer a suggestion—namely, that previously to her pregnancy the mother has been infected by an ovum impregnated with a diseased spermatozoon, and the necessary result of this has been a very early abortion, so early perhaps as only to cause a retarded menstruation; that ultimately two healthy elements have combined, with the result of producing a healthy fœtus. In some cases, moreover, a primary inoculation may have been overlooked. It really seems quite incredible that a child, the offspring of a diseased first element, should apparently be in perfect health at birth, and moreover should have transmitted, long before this time, a disease to its parent of which it shows no symptoms itself. Another fact which supports these views is the period elapsing between the birth and the manifestation of the disease, which, though perhaps a little shorter than the incubatory period of syphilis, is yet not far from coinciding.

Another difficulty with the present received views is the great difference between syphilis and the other hereditary diseases. If it be such it stands forward as a marvellous exception to the others, for not one of them has been proved to be contagious or inoculable, nor does one attack of any of them convey an immunity against another attack. In most, if not all, the individuals subject to hereditary disease health remains until they are subjected to the noxious influences which gave rise to the disease in the parents. In other words, they are born with a greater liability to be influenced by external irritants. Some portion of their construction is weak, but they are not born with the disease.

This is not what is contended for syphilis. Here a disease is fostered in the growing embryo; it is built up with it, but it is not destined to show itself until three or four weeks after birth. No care can avoid the attack. The disease is present, is strictly inherited. The difference therefore is easily seen, because if syphilis corresponded to the other hereditary diseases, a child would be born with a greater liability to take syphilis, but not with the disease. There are some individuals who are born with a liability to take small-pox. These may have it three or four times in their life. They inherit small-pox in the same way as another inherits phthisis; for I am one of those who believe phthisis is always the result of external irritants acting upon a weak lung; the weak lung is inherited, but not the phthisis.

We know that structural differences are inherited, and it is probable that all so-called hereditary diseases depend on structural peculiarities.

Lastly, if we glance at the explanation that has been offered to account for the manifestation of syphilis in the infant four weeks or so after birth, I think we must confess that it leaves the matter in as great obscurity as ever. I refer to the suggestion of Mr. Hutchinson—viz., that the child may manifest symptoms of syphilis when exposed to the light in some such way as chlorophyl is developed in the leaves of a plant, or as the tadpole is developed into the frog by the same influence.

I will sum up in a few words the proposition I have tried to maintain. First, that in most cases of infantile syphilis the fœtus remains healthy until the time of the separation of the placenta, that it is then infected by the blood of the mother, and therefore that in all such cases the mother must have been primarily infected. Secondly, that it is not improbable that the mother is first infected by an early abortion, so early perhaps as only to cause a retarded menstruation, or that in some cases she may have had an overlooked primary sore.

Palace-road, S.E.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE last meeting of this Society, held during the present session, took place on the 23rd ult., the chair being occupied by Dr. Ed. Ballard, one of the Vice-Presidents.

The first paper read was by Dr. W. H. BROADBENT on "Ingravescent Apoplexy, a contribution to the Localisation of Cerebral Lesions." The following is an abstract of the paper:—Sir Thomas Watson, following Abercrombie, describes three forms of apoplectic attack. The first sudden, with loss of consciousness and stertorous breathing; the second beginning with sudden pain in the head, faintness, and vomiting, followed by gradually increasing coma; the third characterised by sudden hemiplegia without loss of consciousness. To the second of these modes of attack the term "ingravescent" has been applied; its characteristic features are absence of loss of consciousness at the outset, gradual accession of symptoms, and speedily fatal termination; and the cause is invariably found to be a large extravasation of blood. The object of this communication is to show that not only is the hæmorrhage large in these cases, but that its situation is, within certain limits, constant, and also that an anatomical explanation can be given of the phenomena of the attack. The seat of hæmorrhage is on the outer side of the extra-ventricular corpus striatum ("lenticular nucleus" of foreign writers), between this ganglion and the "external capsule"; and the explanation offered is as follows:—That the large amount of blood extravasated arises from the large size of the vessels here found, and from the slight resistance opposed to the effusion, and that the absence of loss of consciousness is due to the fact that there is little laceration of fibre or compression of the brain. The situation and relations of the clot are best seen by opening out the fissure of Sylvius, when the convolutions of the island of Reil will be found to be obliterated, and spread out over the effused blood. Afterwards by the usual sections the further course of the extravasation into the ventricle or into the substance of the hemisphere can be traced. The following cases are related:—CASE 1. A man, aged fifty, was suddenly seized with giddiness and slight mental confusion; left hemiplegia was early noticed, but there was no loss of consciousness. He was brought immediately to St. Mary's Hospital, and on admission, though a little excited, he gave an accurate account of the circumstances attending the attack. There was left hemiplegia, with relaxation of the paralysed limbs; no distortion of face, but extreme conjugate deviation to the right of the head and eyes; marked hemianæsthesia affecting face and body, as well as limbs; slight reflex action on tickling left sole. Pulse 108, long and firm, but weak (?) A tendency to sleep became manifest, and the nature of the case being recognised, an attempt was made to bleed. Three veins were opened in the arms, but only a trifling amount of blood could be obtained; the jugulars could not be made to fill sufficiently. Vomiting interrupted further proceedings. The patient continued to sleep, but could be roused till about eight hours after the attack, when stertor suddenly set in; he was then found to be quite unconscious, and in about twenty minutes he died. During the final stertor the lateral deviation of the eyes ceased; the heart was felt to beat for seven and a half minutes after cessation of respiration. On post-mortem examination, hæmorrhage of large amount was found to have taken place between the corpus striatum and external capsule, flattening out and distending the convolutions of the island of Reil, forming a cavity along the outer side of the corpus striatum and thalamus two and a half or three inches long, and penetrating the lateral ventricle by a fissure extending almost the entire length of its outer angle. All the ventricles were filled with blood. There were hæmorrhages into the lungs, spleen, and liver; kidneys contracted and granular.—CASE 2. A woman, aged forty-five, had slight paralysis on January 8th, 1871, which speedily passed

off. On the 11th she suddenly lost power in the left limbs and vomited; she then slept almost continuously for two or three days, waking at intervals, and then appearing to be quite sensible. The urine and fæces were passed involuntarily, and bedsores formed. After about three weeks the patient was brought to the hospital, and was then found to have left hemiplegia with some distortion of face and hemianæsthesia. She died three days after admission. On post-mortem examination, hæmorrhage was found to have occurred between the corpus striatum and the external capsule, bulging out the island of Reil, and dissecting off from the hemisphere both corpus striatum and thalamus, and displacing them inwards. The blood penetrated the corpus striatum about its middle for a short distance; it did not reach the ventricles. Stenosis of mitral orifice, embolisms in the spleen, and contracted granular kidneys, were also found.—CASE 3. A cabman, aged sixty, who, nine months previously, had had a "fit," was noticed by a policeman, about 1 A.M., to be sitting on the box, apparently drunk. He was ordered to get down, answered "all right," and obeyed, got into his cab and was driven to a police station. Here he vomited matter smelling of spirit, and was considered to be drunk by the medical officer who was called in, till left hemiplegia became obvious. When first seen at the hospital, some hours later, he was unconscious, and had left hemiplegia with rigidity and hemianæsthesia. Reflex movement could be provoked in the paralysed limbs. Apparently there was deviation of the eyes. He died on the day after admission. Hæmorrhage had taken place between the corpus striatum and the external capsule, dissecting off this ganglion and the thalamus from the hemisphere, and entering the ventricle by a fissure in its outer angle at about the middle of its length. The body of the intra-ventricular corpus striatum was thus cut off from its tail and from the thalamus. The clot in the ventricle was not very large, and blood had not entered the three ventricles; that in the hemisphere extended forward nearly to the apex of the frontal lobe. The kidneys were contracted and granular, and the heart hypertrophied.—CASE 4. A woman, aged fifty-six, previously healthy, began to drop parcels which she was carrying, and felt giddy. She walked some distance, sat down, and became unconscious. When brought to the hospital an hour later she was apparently unconscious, had left hemiplegia, with rigidity and continued movements of right limbs. She could be roused, and then answered intelligently. She died two days later. Hæmorrhage had occurred in the situation described in previous cases, taking a direction forward into the frontal lobe, dissecting off the corpus striatum, and bursting into the ventricle.—CASE 5. A coachman was grooming his horse in the evening of December 10th, 1875, when he felt a numbness in the right arm. He did not fall or lose consciousness. Hemiplegia came on gradually; in the course of an hour he vomited, and later went off into a heavy sleep. When brought to the hospital next day his mind was confused, his speech rapid and indistinct, and exactly like that of a drunken man, and he had right hemiplegia, with lateral deviation of the eyes (not of the head), and very marked hemianæsthesia. He improved a little, but on the 15th the temperature rose rapidly, being always a degree higher on the paralysed side, and he died on that day. The hæmorrhage here was between the external capsule and the ganglia, but further back than in any of the cases previously reported, and the blood had penetrated into the ventricle between the thalamus and the intra-ventricular corpus striatum, and had also dissected up the posterior end of the thalamus from the tegmentum, and damaged the superior corpus quadrigeminum. The occurrence of extensive extravasation of blood in the situation described has been noted by Charcot, Bouchard, Bourneville, Prévost, Duret, and others, and the cases related connect it with the ingravescent mode of attack. Duret has shown that the author had observed independently that the vessels entering the brain at the interior perforated space and in the fissure of Sylvius for the supply of the corpus striatum, run up between the grey substance of the ganglion and the external capsule. Some of them are of large size, and their mode of termination predisposes to rupture. This is the great cause of the liability to large hæmorrhage. The inner layer of the external capsule consists of fibres arising in cell processes of the corpus striatum, but it is detached with great facility, offering, therefore, little resistance to extravasation of blood. The Sylvian fissure again affords room for the expansion of the island of Reil, which lies immediately upon the capsule—a fact which diminishes the pressure, and not only permits of the hæmorrhage, but prevents compression of brain-substance by the effused blood, thus obviating early coma, and explaining the ingravescent mode of attack. In its further course the extravasated blood must tear the fibres, and it is remarkable that it does not burst through into the fissure of Sylvius, from which it is separated only by a thin plane of fibres, or enter the temporo-sphenoidal lobe. The fibres torn are those of the corona radiata as they issue from the central ganglia to pass to the hemisphere, and it is probable that the intersection of the fibres of the external capsule with these, and the passage of minute arteries and larger and more numerous veins, afford minute openings by which the blood makes its way. Ultimately the blood may penetrate the ventricle or split up convolutions.

A paper was then read by Dr. GALABIN, "On the Causation of the Water-hammer Pulse, and its Transformation in different Arteries, as illustrated by the Graphic Method." The following is an abstract of this paper:—The explanation of the characteristic pulse of aortic regurgitation now generally received differs but slightly from that given by Sir Dominic Corrigan in his first paper on the subject, published in 1832. This explanation is that the aorta and adjoining arteries are rapidly emptied during diastole, in consequence of the pouring back of the blood into the heart, while at the same time a large wave is thrown into them by the dilated and hypertrophied left ventricle. The peculiar quality of the pulse is therefore regarded as being simply the effect of an ample wave being thrown into an empty artery, and the reason why it is developed by raising the arm is considered to be merely that the radial artery is thus rendered more empty during diastole, because the reflux of the blood is then assisted by gravity. The most diagnostic quality of the aortic pulse, however, is that from which its expressive title of water-hammer pulse has been derived—namely, the extreme suddenness in commencement of the wave. By this character it may be recognised, even when it is not very ample, as in cases in which mitral is combined with aortic regurgitation. It is, moreover, solely this quality of suddenness which is increased in elevating the arm; since the sphygmograph shows that the height of the upstroke is generally not increased, but diminished by this means. The hypertrophy of the heart will not account in any degree for the suddenness of the wave, for an hypertrophied muscle commences its contraction more gradually than one which is weak, and the cardiograph shows that this is true in the case of the heart. Thus, among the characters of the aortic pulse which are manifest to the finger, that which is most diagnostic receives no explanation whatever from the common theory of its causation. Sphygmographic tracings of an aortic pulse show a flatness in the diastolic portion of the trace, implying a corresponding emptiness of the artery, when regurgitation is great. In slight cases, however, this flatness may be absent, even when the pulse appears characteristic to the finger, and then the only special quality in the trace is the suddenness of the upstroke. The dicrotic wave, again, is relatively smaller when regurgitation is free, but its magnitude depends on many other things besides the integrity of the aortic valves, and it may be quite as large as usual in a pulse which, to the finger, has a distinct aortic quality. Tracings are shown illustrating this, and also the effect on the aortic pulse of fever, under the influence of which the pulse may become hyperdicrotic, while the magnitude of the dicrotic wave is still relatively small. The sphygmograph shows also another peculiar quality about the pulse-wave of aortic regurgitation—namely, that it varies greatly in shape in the different arteries. Tracings are exhibited from several arteries of the same patient, showing that in the carotid the wave is broad, square, and not sudden, while in the dorsalis pedis it is extremely lofty and sudden. Generally the quality of suddenness is developed nearer to the heart, and is manifest in the radial artery, but it is never marked in arteries close to the heart. Of this several other instances are shown. Thus the water-hammer quality of the aortic pulse does not exist in the pulse-wave as it is thrown into the aorta, but is gradually developed as the wave recedes from the heart. In seeking the mechanical explanation of this change in the pulse-wave, by which its front becomes progressively

steeper, some analogy may be found in the similar change which takes place in waves on the surface of water as they approach the shore, and in the tidal wave on certain rivers, by which it acquires a steep and broken front, known as the "bore." In these two instances the explanation is the same—namely, that the velocity of the wave is greater the greater the depth of water. By a well-known mechanical principle, each portion of a wave may be regarded as moving, to some extent, like a separate wave. Hence, as the water becomes shallow, and the depths at the crest of the wave therefore perceptibly greater than the depths at its base, the summit of the wave moves faster than its front, and tends to overtake it, so that the front of the wave grows steeper and steeper, till it curls over and breaks. In the case of pulse-waves in elastic tubes, it is proved, both by calculation and experiment, that the velocity is greater the greater the tension. Since, therefore, tension is greatest at the summit of the wave, there will be a tendency for the summit to travel fastest, and for the front of the wave to become progressively steeper. This tendency will be proportional to the difference between the maximum and minimum tension. This must hold true to some extent in the normal pulse, and accordingly it is found that normally, as the wave proceeds, its upstroke retains its steepness much longer than its downstroke, and more and more of the volume is piled up at the front of the wave. Tracings are shown to illustrate this. When aortic regurgitation exists, tension is very high at the systolic part of the wave, and very low during the diastolic portion; the change in shape is therefore much greater than in the normal pulse, and the front of the wave grows actually steeper as it proceeds. The water-hammer quality of the aortic pulse is therefore produced by the occurrence in an exaggerated degree of a change in shape of the wave, which happens to some extent even in the normal pulse. Since the suddenness of the wave often reaches its maximum at a point not far from the smallest arteries, the motion of the blood is probably unequal even in the capillaries, and hence the great failure of nutrition which accompanies aortic regurgitation may be accounted for.—Dr. BROADBENT considered that the ventricular dilatation and hypertrophy accounted for a large part of the phenomena of the water-hammer pulse, and he could not agree with the author of the paper in comparing the latter to the tidal "bore" of rivers. Further, the circumstance that the radial pulse-wave is not higher when the arm is raised is not explained by Dr. Galabin's interpretation. In well-marked aortic regurgitation the vessel is completely emptied and absolutely flattened between each pulsation, and the height of the wave-line with the suddenness of its production will depend upon the force which restores to the vessel its cylindrical character. Was the tracing from the dorsalis pedis artery taken in the erect position, or when the subject was lying down?—Dr. HANDFIELD JONES exhibited some sphygmographic tracings showing the effect of elevating the arm, the primary wave becoming more developed the higher the arm was raised. He thought such tracings showed that in the dependent position of the arm there was the least difference between the condition of the artery during systole and diastole. The tracings showed also that the primary rise in a great degree measures the amount of expansion of the artery. Dr. Jones added that Dr. Broadbent had noticed flushing of the hands with each pulsation, showing irregular capillary circulation.—Dr. GALABIN, in reply, stated that he did not dispute the truth of the ordinary theory, and he had no doubt that the dilatation and hypertrophy of the heart do cause a large proportion of the phenomena. He thought that it was now generally accepted that the pulse was a true *wave*—i. e., a transmission not of actual particles of matter, but of molecular vibrations, due to alternating states of pressure and motion. Dr. Jones's tracings were of interest, and he had himself noticed the height and steepness of the primary wave to be increased when the arm is raised, but the increase in the suddenness of the wave is not accounted for on the ordinary theory. The roundness and squareness of the tidal wave attributed to hypertrophy indicate not a persistent arterial tension, but merely high tension during the systolic period corresponding with low tension during the diastolic. The tracings from the dorsalis pedis artery were taken with the leg in the horizontal position.

(To be concluded.)

CLINICAL SOCIETY OF LONDON.

(Concluded from p. 852.)

THE abstract of a paper by Dr. DUFFIN, on a case of Cerebral Tumour implicating the Corpora Quadrigemina, was read by the Secretary. The subject, who was a steady, powerful man, first evinced symptoms about four months before his death. The earliest symptom was a sense of dragging at the back of the neck; the walk early became unsteady, and there were repeated attacks of vertigo, which diminished when the eyes were closed. Headache, at first slight, soon became so intense as to prevent sleep, and was agonising two months before death. The patient could only stagger along with assistance, though he could freely move his limbs when recumbent. When lying in bed the head was always thrown back, and the muscles of the back of the neck and spine were tense. The sight was from the first very defective, and soon lost entirely, and there was marked double optic neuritis. Hearing was dull, and tinnitus a marked symptom, but the man responded to the aerial and skull vibrations of a tuning-fork. The pulse was very slow and irregular, and vomiting was frequent. The temperature throughout was almost normal. The intelligence became obscured only about a fortnight before death, when drowsiness and nocturnal delirium set in, and gradually passed into coma. On post-mortem examination the corpora quadrigemina and the pineal body were found to be replaced by a glioma. Anteriorly a nodule projected into the cavity of the third ventricle, and another portion of the tumour extended along the aqueduct of Sylvius, and bulged into the upper part of the fourth ventricle. A considerable portion of the right optic thalamus had also atrophied from pressure, and the right superior peduncle of the cerebellum was likewise involved. The valve of Vieussens, although much stretched, could be recognised, and the tumour could be almost entirely enucleated from the surrounding parts. Dr. Ferrier, who had furnished a written commentary on the case, confessed that there was a difficulty in differentiating between the direct and indirect effects of the lesion. From the position of the tumour on the corpora quadrigemina, he thought that impairment or abolition of vision might be expected, though this was often found independently of localisation in this region. It was evident that vision was affected in some special manner from the vertiginous sensation and disorders of equilibrium, which were more marked when the eyes were open. The vertigo, disturbance of equilibrium, and tendency to retraction of the head, were special and distinctive features which were usually found in connexion with tumours of the middle lobe of the cerebellum, but this case raised the question as to how far they might be due to pressure on the corpora quadrigemina. Experimental destruction of these bodies annihilates vision and irido-motor action, whilst irritation of them shows itself by dilatation of the pupils, retraction of the head, and a tendency to trismus, and by general opisthotonos and rigidity of the limbs when the irritation is painful. Dr. Ferrier's own experiments confirmed those of Serres, Goltz, and others, in showing that marked disorders of equilibrium, without absolute motor paralysis, ensued from their destruction; and the symptoms in this case agreed with the results of physiological investigation, although it was difficult to determine how far irritative or destructive effects predominated.

Dr. PEARSON IRVINE read an account of a very interesting case of Diphtheritic Paralysis simulating extensive lung disease. The patient, a girl six years of age, was first seen by him as an out-patient, at the Charing-cross Hospital, on May 22nd, 1875. She had suffered occasionally from bronchitis. About five weeks before she was first seen scarlet fever was said to have occurred in the family, and the death of one child was certified as from this disease. The other children of the family, including the patient, had sore-throat, but recovered rapidly; and fourteen days before the first visit to the hospital the girl appeared quite strong—in better health than she had been for some time. Somewhat suddenly she began to exhibit symptoms of bronchitis, bringing up sputa, at times streaked with blood, and after

being feverish for a few days lost flesh very rapidly. When first seen the patient was thin, but did not look severely ill. The pulse and temperature were nearly normal, respiration 14. Breathing was shallow; there was almost constant cough, but without expectoration. Tracheal mucous rattle was audible without the stethoscope, but there was no appearance of asphyxia. There was dulness with deficient expansion, and tubular breathing with whispering pectoriloquy under both clavicles. There was also almost absolute dulness in both supra-spinous fossæ. Strong rhonchal fremitus and all forms of bronchitic râle were discovered over the whole chest. Complete dulness existed around the cardiac area for a considerable extent, simulating pericardial effusion. The heart's apex was just below the nipple, sounds very distinct, free from murmur. There was excessive action of the diaphragm. On May 26th, four days later, the same symptoms continued, the child having meanwhile been very ill, restless, and semi-delirious at night. Double strabismus now existed. A further inquiry into the history of the supposed scarlatinal attack led to the suspicion that it must have been diphtheritic. The child who died was ill only twenty-five hours, and the fatal termination was like that of croup. In no case was there any rash on the body. On further examination of the patient there was found very extensive, though not very marked, paralysis. There was drooping of the head, due to loss of power of the extensors; also lumbar hollowing, causing thus a double curvature of the spine. The child walked clumsily; the limbs had been noticed to twitch; the speech was thick; swallowing imperfect, and attended by pharyngeal gurgling. The uvula and palate were relaxed and filled up the throat, which was anæsthetic. A week later, June 2nd, the voice was nasal, and the patient could not pronounce her own name distinctly; and the face was drawn to the right when the patient laughed. On June 5th the patient was quite cheerful; the paralysis had much diminished, though a little indistinctness of speech remained. The chest was entirely free from râles, and there was increased resonance over the previously dull parts. During the next month the patient recovered completely, slight dulness under the right clavicle alone remaining after that time, and the cardiac area of dulness being almost normal. She was treated with cod-liver oil and perchloride of iron, but what appeared most efficacious was friction of the chest and cervical region with cod-liver oil. Dr. Irvine remarked that all or nearly all the symptoms in this case were probably due to paralysis succeeding diphtheria, which had been diagnosed as scarlet fever. The symptoms had the greatest resemblance to those of extensive lung disease, as was clear from the account given. The temperature was, however, always normal; but, according to some observers, considerable changes, such as those described, might occur without much elevation. With regard to the chest, he thought that there must have been a paralysis of the muscles of the upper part of the thorax, and a consequent partial collapse of the lungs of expiratory origin, and allowing of an accumulation of secretion. Symptoms of extensive bronchitis might arise from a paralysis of the muscles of their tubes and a loss of their action, which, though its existence was denied by many physiologists, Reisseisen, their discoverer, alleged that they possessed. There was no excessive accumulation of mucus, nor any excess of sputum, for the simple reason that there was no excessive secretion—in fact, no true bronchitis. Had severe bronchitis arisen, death must have occurred rapidly, and the recovery was not like that from severe bronchitis. Expansion of the upper part of the chest recommenced coincidently with the cessation of paralysis in other parts, and all dulness disappeared, except very slight at the apex, where probably some old consolidation existed. There was no time for any discussion on the paper.

Mr. GEORGE BROWN read a paper on a case of Acute Arthritis of the Knee-joint and Necrosis of the entire Shaft of the Tibia in an Infant, in which amputation was performed, followed by recovery. The patient, Jane P——, aged eight months, was brought to Mr. Brown, at the Islington and North London Provident Dispensary, on December 23rd, 1875, apparently suffering from an affection of the knee-joint. Up to the previous evening the child was quite well. When first seen the child was well nourished, edentulous, with an anxious expression of countenance. The right knee was slightly swollen; leg semiflexed, and hotter to the touch than the left. No fluctuation; no history of injury. The patient was evidently suffering much pain; refused food, and was unable to sleep. Next day the swelling of the knee had increased; the temperature rose to 103°, and the pulse was 140. The swelling of knee and leg continued to increase until the 28th, when the right knee and calf were three inches larger in circumference than the left. Distinct fluctuation could be detected all around the joint and about three inches down the leg. On the 29th the leg was opened just below the patella, and seven ounces of purulent matter were evacuated, containing a quantity of large curdy flakes, with some oil-globules. On passing the finger into the wound, the tibia could be felt quite rough, and denuded of periosteum as far as the finger could reach. The epiphysis was separated from the shaft of the tibia. The temperature was then normal, to which condition it had fallen suddenly on the 28th. After the abscess was opened the patient appeared to suffer much less pain, and went on well for some days; but on Jan. 5th she had an attack of vomiting, and the leg became erysipelatous. The temperature rose to 104°, and continued very high for several days. The wound discharged pus freely, and the erysipelatous condition of the leg continued until January 23rd. Meantime the patient became much emaciated, and was gradually sinking. Mr. Brown then proposed amputation, to which the parents consented; and he performed the operation, assisted by Mr. F. H. Hume and Mr. Sebastian Gardiner, on January 25th. The thigh was amputated in the lower third by the lateral flap method. After the operation was completed the child became cold, blanched, and pulseless, and only recovered from the shock and the effects of the chloroform after artificial respiration had been kept up for some time. The stump healed almost entirely by first intention, but a small sinus remained open for nearly three months. A small spicula of bone was then removed from the sinus, and it healed up at once. On examining the amputated limb, it was found that the entire shaft of the tibia was denuded of periosteum and necrosed; the epiphysis was completely separated from the shaft, and in it was an abscess-cavity, which opened by a small pin-hole into the joint about the centre of the external semilunar cartilage; the articular cartilages of the joint were otherwise healthy. The synovial sac was slightly thickened.

Reviews and Notices of Books.

A Manual of Diet in Health and Disease. By T. K. CHAMBERS, M.D. Oxon., F.R.C.P. Second Edition. London: Smith & Elder. 1876.

IT is with satisfaction that we welcome the second edition of Dr. King Chambers's Manual of Diet. The book is marked by much good sense. It is of course made up chiefly of the ordinary well-known facts of dietetics, such as are to be found in every manual on the subject; but these are supplemented by the result of much shrewd observation. The way in which each moot subject is discussed is on the whole fair and impartial. A few crotchets peep up here and there; but who that ventures to observe and reason for himself in dietetics can write himself free from them?

The three parts into which this small, handy volume is divided discuss the subjects of General Dietetics, Special Dietetics of Health, and Dietetics in Sickness. The theories of dietetics are briefly glanced at and the special points in the choice and preparation of each kind of food are described at length. The chapter on the choice of food, extending over seventy pages, includes a full consideration of the elective indications of both wine and water. The physiology of digestion and of nutrition is more briefly sketched. The second part of the book contains sections on the diet and collateral hygiene of infancy and motherhood, of childhood and youth, of commercial, literary, and professional life, of noxious trades, of athletic training, of travelling; on the effects of climate, on starvation, poverty, and fasting, and on diet in the decline of life. Dr. Chambers

does not by any means coincide in the sweeping condemnation of athletics and training which has been of late fashionable; indeed, we are not quite sure that in his *apologia* he does justice to the other side of the case. The chapter on Alcohol is a useful outline of what we hold to be the true aspect of the question. The physical and moral effects of the use of alcohol are both discussed in a thoughtful manner. We should be glad to see the chapter reprinted in a pamphlet, in a cheap form; its wide circulation would do much for the cause of temperance.

The last section of the book includes the dietary of fever and inflammation, weak digestion, gout and rheumatism, gravel, stone, albuminuria and diabetes, deficient evacuation, nerve disorders, scrofula, rickets, and consumption, and diseases of the heart and bloodvessels. This portion of the book brings out one of the weak points in its plan, the attempt, namely, to suit it to both the professional and the general reader. The attempt has been only partially successful. Some medical words, as aneurism, are explained, but others are left unexplained. The early chapters, especially on the choice of food, are likely to be of use to housewives; but a book which alludes to some subjects mentioned in the latter part, such as *pollutio nocturna* and *impotentia coram fœmina*, can hardly be placed in the hands of ladies.

In the second edition the whole work has been revised and added to, some details in the chapter on alcohol having been omitted in order not to increase the bulk of the work.

Methodik der Physiologischen Experimenti und Vivisectionen. Von E. CYON. Mit Atlas. Giessen: J. Rickersche Buchhandlung. London: Williams and Norgate. 1876.

PHYSIOLOGICAL experiments have two objects in view, says M. Cyon—either to corroborate the truth of the statements made by others or to obtain fresh information. When an experiment is determined upon, it is important first to see whether the means at hand are sufficient for the purpose; secondly, to avoid the production of secondary or subordinate phenomena; and, thirdly, to be sure that the experiment is well adapted to answer the question put. Very slight variations in the conditions of an experiment often produce great differences in the results obtained. No question can exist in regard to the importance of mechanical apparatus in the performance of physiological experiments, since, by their means, greater exactness is introduced, the sequence of events is more uniform, and the disturbing influence of personal equation is eliminated. A large number of our mechanical aids to research, as the microscope, the telescope, resonators, &c., assist our organs of sense; whilst others, as levers, reflectors, &c., cause movements to be apparent and easily followed that would otherwise be imperceptible. Many other instruments are adapted to estimate or register intervals of time of extreme minuteness, and motions that are otherwise almost, if not quite inappreciable. To so high a degree of precision have the mechanical details of these instruments attained, that a period of time not exceeding one-thousandth of a second can now be accurately estimated. By appropriate acoustic and optical means, he states that he is able to make his lectures and experiments conveniently audible and visible to 600 persons at once.

In regard to vivisections, M. Cyon is sufficiently guarded in his remarks in his prefatory chapter, though it must be admitted that the experiments proposed are not always such as would meet with the approval of the committee that has recently sat on this subject. No vivisection, he very properly says, should be undertaken if the knowledge required can be obtained in any other way; and, further, whenever it can be done, the animal should be narcotised, either by chloroform or by chloral or opium. The directions given under the head of "general rules of experimentation" in respect to the mode in which operations should be performed, the preliminary measures that should be adopted, the necessity of frequent observations and dissections on dead animals, so that as little injury as possible should be inflicted on the living; the necessity of attention to temperature, of avoiding hæmorrhage, and of having all the apparatus likely to be required at hand; the importance of selecting special animals for special experiments—as, for example, birds in removing parts of the encephalon, dogs and tortoises, and frogs, for experiments on the cardiac nerves, and rabbits for those on the sympathetic nerves,—are all excellently laid down.

An introductory chapter is devoted to the mode of performing blood-injections in organs removed from the body. The anatomy of the dog, rabbit, and frog is given sufficiently for all ordinary experiments; and M. Cyon states he would have added that of the horse and some other animals if he had not been driven from his laboratory by a blind fanaticism. He has purposely omitted the processes of physiological chemistry and descriptions of physical apparatus. This chapter also gives an account of the action of woorara, and of the modes in which artificial respiration may be maintained.

The second chapter is engaged with Hæmodynamics; the third with Respiration; the fourth with Secretion and Excretion; the fifth with the General Physiology of Nerve and Muscle; and the sixth and last with special Nerve Physiology, of which the first part only is now published.

The work consequently will, when finished, be very complete. It is written throughout in a very lucid and intelligible manner, and is an absolute necessity for any working physiologist.

The illustrations, which are between two and three hundred in number, are beautifully executed, and represent in many instances most complicated apparatus with a degree of clearness that leaves nothing to be desired.

On Personal Care of Health. By E. A. PARKES, M.D., F.R.S., &c. London: Society for Promoting Christian Knowledge.

PECULIAR interest must attach itself to this, the last, and, with deep regret be it written, posthumous publication of Prof. Parkes. A popular exposition of his views on personal health is sure to be valuable, and will be eagerly read by all classes. Health is at first defined, and in the second, third, and fourth chapters its care during youth, adolescence, and old age is dwelt upon, while in the fifth what Parkes loved to call preventable diseases are treated of. In the Appendix there are a few simple sanitary hints for working men. Cleanliness and moderation in all things are the key-notes of this excellent little work, and as the profession of Christianity involves the practice of personal hygiene, it was fitting that the Society for Promoting Christian Knowledge should have undertaken its publication.

Landmarks, Medical and Surgical. By LUTHER HOLDEN, F.R.C.S., Member of the Council and of the Court of Examiners, Senior Surgeon to St. Bartholomew's Hospital. London: Churchill. 1876.

THESE "Landmarks" have been republished, with some additions, from St. Bartholomew's Hospital Reports, and their author has done well to republish them, for they strike us as being uncommonly useful and good.

Information of this kind is required for every-day practical purposes in diagnosis and operations, and a thoughtful study of this volume, along with an examination of a man's own body or that of another person, will speedily demonstrate to any intelligent student or observant practitioner

how much can be learnt in this direction, and how valuable is the information acquired thereby. This kind of study has been far too much neglected, and for lack of it a good anatomist even may fail to discover and recognise what lies immediately under his eyes and beneath his finger-tips. A good many students and practitioners, besides the past and present students of St. Bartholomew's, would be benefited by exercising themselves in appreciating these "Landmarks," and join with us in thinking that Mr. Holden has produced a really valuable and capital guide to information which it behoves every practitioner to know and practically apply.

REPORT OF The Lancet Commission ON LUNATIC ASYLUMS.

NOTHING has impressed us more forcibly during the present inquiry, so far as it has yet been carried, than the permanent and increasing value of the service rendered to the cause of humanity, and indirectly to the interests of medical science, by the Commissioners in Lunacy. We do not recognise the wisdom of all their recommendations. There are matters of high moment to which we think they attach too little importance, and points whereon they lay considerable stress that appear to us utterly insignificant. But in the main, and touching the greatest and gravest interests in lunacy, whether regarded from the philanthropic or professional standpoint, it is impossible not to feel that in the conception and working out of a scheme by which a most pitiable and helpless class of sufferers has been rescued from a condition little better than slavery and cruelty worse than neglect, and placed under the protection of a body of public inspectors, Lord Shaftesbury has established a claim upon general gratitude, and done more than sufficient to render a life of service, otherwise so remarkable, illustrious in the annals of social reform, and in a special sense entitled to the respect of enlightened medical men. It is not alone that crying abuses have been remedied, the baneful prejudices which, until comparatively recent times, brooded over the whole subject of mental disease and its victims have been uprooted, and the entire system of socio-medical treatment reformed. The faults and failures of to-day are due in part to errors of judgment, to some extent they may be the fruit of bad seed sown in bad times and not easily eradicated, but scarcely in any appreciable degree can they be attributed to present neglect, or even lack of earnestness in pushing forward useful reforms and applying a remedy to known evils. Here and there a self-sufficient committee, or an inert superintendent who has not moved on with the age, may cast obstacles in the way of improvement; but, speaking generally, enlightened emulation has taken the place of ignorance and indifference, a real desire to relieve suffering, advance the triumph of science over disease, and wipe out the reproach of want of sympathy, is apparent, and a resolute determination to grapple with the most formidable of difficulties is found where a while ago the single governing idea—in so far as there can be said to have been an idea beyond routine discipline—seemed to be one of selfish ease and social parsimony. The improvement is chiefly evident in the character of the provisions made for the insane in asylums, and the domestic conditions and surroundings of their daily life. It is in these departments almost exclusively that the influence of the Commissioners in Lunacy makes itself felt, and it is only just to acknowledge that most of the good that has been effected is traceable either directly or collaterally to their interference. We do not mean to assert that all, or even the majority, of the beneficial changes which have been made were commenced or carried out at their specific suggestion, but the fact of commissioners visiting asylums at unexpected and tolerably frequent periods, and publishing their reports, has applied the kind of stimulus needed to arouse committees and incite superintendents to healthy action, while public opinion has been informed and enlightened so as to clear the way of many economic obstacles to progress. Lethargy has been exposed and zeal supported. The aid rendered has been slow and sure in its effects. What has been accomplished is only a tithe of that which remains to be done, but the *vis inertiæ* of ignorance has been overcome, and the energy by which this has been effected is happily inexhaustible. While the Commission continues its useful labours the improvement will be constant. Each year's progress increases the momentum, and every step in advance lessens the difficulty.

The time has arrived when the medical profession, as a whole, should begin to manifest a keener interest in the subjects and treatment of insanity. Mental disease ought not any longer to be allowed to stand apart as a malady by itself. It has passed through the conventional stages of misconception. It has been gazed upon with stupid awe as a supernatural visitation, with which science had neither the power nor the right to meddle. It has been regarded with horror and loathing, as something to be put away out of sight, and from which society chiefly needed protection, but to which, in return, sane humanity could have few obligations. It has been treated as a phenomenon only remotely related to physical disease, and its study and cure relegated to the cold shade of a specialty. The time has now come when the subject needs to be investigated from a new point of approach and in a more rational mood. It is discreditable to the progress made in other departments of medical science that a malady, or class of affections, the victims of which die in numbers nearly as large as the "recoveries," should be practically disregarded by the majority of busy practitioners. The consequence of this state of things is that, although a considerable part of the population—on January 1st, 1875, 63,793 persons, or 26·64 per 10,000—labour under diseases destroying the powers of self-control and self-help in the individual and deteriorating the race, beyond locking them up in asylums and hospitals, where they are supposed to be out of harm's way, little thought, and only a very small share of the total skill and industry devoted to the investigation and treatment of morbid phenomena, are brought to the cure of this humiliating and increasing scourge.

Of the total number of lunatics under "treatment" in county and borough asylums during 1874 (40,163), only 3674, or 9·14 per cent., "recovered"; while 3424, or 8·52 per cent., died. Turning to the asylums we have visited in Middlesex and Surrey—Hanwell, Colney Hatch, Wandsworth, Brookwood, and the City of London (excluding Bethlem and St. Luke's as hospitals, and the institutions for imbeciles at Leavesden, Caterham, and Hampstead, as workhouses)—we find the total number under treatment in the five asylums named, during the year 1874, was 7267. Of this number 684, or 9·41 per cent., recovered; while 570, or 7·84 per cent., died. It is evident from these figures, so far as conditions may be inferred from results, that we have to deal with fair sanitary and well-conducted establishments. The average death-rate in the two metropolitan counties is, it will be seen, somewhat below, and the proportion of cures a fraction above, the like rates for the total of similar institutions in England and Wales. Meanwhile it is a little startling to find that, taking the gross number of "cures" and "deaths" in these five asylums for the last ten years, the latter exceeds the former by 21·14 per cent.: thus 4906 deaths, and only 4124 cures, are recorded. We introduce these figures at this point only as throwing some general light on the character and efficiency of the establishments visited.

In their report for 1874, the last *printed*, the Commissioners repeated the familiar complaint "that the county and borough asylums were gradually becoming more and more occupied by a large proportion of chronic and harmless patients who might be adequately provided for in well-organised workhouse wards." The justice of this opinion has been forced upon us at every stage of the present inquiry. In the five asylums visited, the proportion per

cent. of "curable," that is recent, cases was as follows:—At Brookwood, the newest and presumably the most commodious and well-fitted building, 26·49; Colney Hatch, 33·54; Hanwell, 36·76; Wandsworth, 43·05; City of London, 21·77: the mean is about 32·30, leaving 67·70 as the proportion per cent. of chronic cases. It is certainly not putting the facts too strongly—we question whether it is strong enough—to say that at these establishments half the chronic cases that drag along year after year would be as well off in the so-called "insane wards" of any properly conducted workhouse. In round figures we may assert that quite one-third of the accommodation in the county and borough asylums of Middlesex and Surrey is wasted. It is in the face of these facts that boards of quarter sessions are striving to increase the number of asylums, on the general ground that lunacy is increasing. We do not think it necessary to discuss the question how far the apparent "increase" may be due to greater vigilance in discovering cases, and perhaps some change of opinion as to what lunacy is. Even assuming that the increase is real, and its magnitude as great as it is represented to be, we can only repeat what we said at the outset, in the report on Brookwood: if the moment a new asylum is opened, with all the best modern appliances, it is filled with patients withdrawn from the licensed houses, and treated as an almshouse for the aged and infirm paupers who happen to be eccentric and troublesome in the neighbouring workhouses, it will be necessary to go on building asylums until no inconsiderable portion of the pauper population is returned as "insane." No one carefully examining the inmates of asylums generally can fail to notice that a large part of the multitude is made up of individuals of all ages who are either physically disabled or disinclined for work. Vicious young persons of both sexes, sullen middle-aged people with grievances and a grievous intolerance of laborious or sustained exertion of any kind, with poor old folk in whom the light of reason has begun to wane; a few idiots, more cheaply maintained in an asylum than at a suitable training institution, as the law directs; and a crowd of confirmed epileptics, for whom little good can be effected, make up the population of most county and borough asylums. It is impossible not to feel that the policy which fills an institution designed to cure and check the progress of insanity with such cases is short-sighted and misconceived. The provision for really insane cases, if not ample, is much larger than it seems; but it is diverted from its proper purpose. The skilled medical superintendents, the expensive staffs, and the costly appliances of public asylums are employed, not in curing mental disease, but in securing the safe custody and ministering to the bad temper of turbulent, or assuaging the sorrows of decrepit, paupers, who might be equally well controlled or kindly treated, as the case required, in a workhouse, and at considerably less expense to the ratepayers. We have every sympathy with the afflicted poor, but some thought is due to the struggling bread-winners who pay rates. If the work done at asylums can, in part at least, be done as well for less money elsewhere, it is a duty to protest against the multiplication of establishments misappropriated and an increasing expenditure misapplied. It will be evident from what we have said in our Report on the Workhouse Asylums at Leavesden, Caterham, and Hampstead that we do not regard the creation of establishments like these as an improvement on the overcrowding of county asylums with cases obviously incurable. The remedy is worse than the evil it was designed to remove. It opens the way to greater abuses. We have stated in plain terms in the report what these are. Since that opinion was formed we have found the following in the Metropolitan Asylum District Minutes. We were unaware of its existence until some weeks after our report was printed. It is a passage from the report of a medical superintendent, who deserves great credit for the courage and sagacity which have prompted him to write so plainly on a point of urgent importance:—"I would also again repeat the observation I made in my report of last year, with regard to the mental condition of many of the patients admitted—viz., those suffering from the ordinary effects of age or paralysis. These are not *truly* insane, imbecile, or idiot, and ought in no way to be classed with them; they labour under no delusions, they give coherent answers, there is nothing irrational in their conduct; in many cases there is only 'impairment' of mind or memory, which should not prevent their being treated in an ordinary hospital or workhouse infirmary. The presumption is strong that many are removed to the asylum as *the easiest way of getting rid of the trouble of nursing them.*" The last italics are our own. The existence of houses in which troublesome paupers may be put away for peace' or ease' sake cannot but be regarded as a source of anxiety and peril. On the subject of "recoveries" at the metropolitan asylums, which, of course, should not occur, unless quite exceptionally, at institutions devoted to "incurable" cases, the Commissioners in Lunacy say:—"Although mental recovery has been the result of sending to the asylum the patients last referred to (some 'chronic' cases which were cured!), others, we fear, of the same class have probably been admitted, and have now lapsed into chronic cases from want of that close medical observation and treatment, and those curative agencies generally, which are found in county asylums." We think the creation of an intermediate class of institutions between the workhouse and the asylum properly so-called is a failure. No one ought to be treated as a lunatic, imbecile, or idiot who is not so described by medical certificate after legal examination. Imbecile paupers are best cared for and treated in the infirmary wards of workhouses unless actually insane. We do not think even cases of "senile dementia" should be placed in an asylum unless symptoms unconnected with the decay of mental power render the step necessary. No amount of trouble in nursing, still less the requirement of a liberal diet or considerations of mere convenience, should be held to justify classing such sufferers as "persons of unsound mind." Much mischief results from the confounding of totally different states of body and mind under the term "lunatic." For this confusion and its consequences the law is responsible, and its provisions urgently demand the interference of the Legislature. The construction of intermediate houses like Leavesden, Caterham, and Hampstead was avowedly a temporary expedient. It was the product of an attempt to get rid of the difficulty of compelling boards of guardians everywhere to improve their diet lists, and give better accommodation and more abundant and richer food to the aged, infirm, and demented paupers in workhouses. The existence of these anomalous institutions has created a new difficulty without greatly reducing that which it was designed to remove. The immediate effect has been to provide increased facilities for getting rid of troublesome paupers by providing for them without incurring the charge of maintaining their families, for evading the obligation of properly training idiots, and generally for placing persons under detention who have not legally lost their claim and right to liberty. The allowance of four shillings a week per head for lunatics which was made in 1874 has, no doubt, modified the character of these intermediate institutions. There is now a loss of sixpence per week on every lunatic sent to a workhouse instead of to an asylum; but generally this has only had the effect of laying these institutions open to greater abuses. They cannot, as was at first proposed, be economically applied to relieve the asylums; their chief use, therefore, is as houses of detention for troublesome and expensive paupers. To these last-named inmates of "workhouse asylums" must be added the patients who can be withdrawn from licensed houses, where the cost of maintenance, even allowing for the rebate of four shillings, somewhat exceeds the seven shillings per week for which paupers can be supported at the metropolitan asylums. Such cases lose the advantage of asylum treatment, just as the idiots kept at workhouse institutions are deprived of the benefits likely to result from proper training. The obvious necessity is to induce, or, if need be, to compel, the authorities of workhouses to make sufficient and suitable provision for the maintenance of all imbecile paupers, and for those affected with various forms of mental or bodily disease which do not admit of improvement by treatment at a special institution. It would be easy to carry this policy into effect, and the result would be to save money and prevent abuses. The moral effect of a great social distinction between the provision for able-bodied and for infirm paupers in workhouses would in itself be useful as showing that while society recognises the obligation to succour the helpless poor, it has no disposition to pamper idleness or that lack of energy which so readily assumes the position of being "unable to find anything to do."

The problem of providing accommodation for lunatics of all classes is sufficiently difficult of solution, without complicating matters by treating as lunatics those who are not actually insane. The practical question from which this zeal in building "workhouse asylums" has, for the moment, distracted attention, is whether "acute" and "chronic," or, which is much the same thing, "curable" and "incurable" cases ought to be treated in the same establishment? It was, probably, the embarrassing nature of this question, as much as anything else, that led to the expedient of building intermediate houses; which, as originally projected, were, no doubt, meant to relieve the asylums, whereas in fact they only relieve the workhouses, and divert cases from the licensed houses, and county and borough asylums, as we have already explained. The question has arisen everywhere—in America, in France, in Germany,—and the same conclusion seems to have been reached from every standpoint of the controversy. It is undesirable, if not impossible, to eliminate all chronic cases from asylums, but something must be done to reduce the overwhelming proportion of cases sent to asylums which are "incurable." In their report for 1872, the Commissioners point out that the percentage of cases "deemed incurable" in the county and borough asylums generally was only 8·12 per cent. on the total number of inmates for England and Wales. The figure is considerably higher for Middlesex and Surrey alone; but, as we have shown, the accommodation wasted is greatly in excess of reasonable proportions. It is probably necessary to retain a sufficient number of quiet cases in every asylum to insure discipline. The necessity is, however, often exaggerated, and when the need is interpreted so as to include the performance of the greater part of routine work by the labour of harmless lunatics, extending, as sometimes happens, to the care and control of troublesome inmates by those who are tractable, we think the argument becomes untenable. Without doubt, employment is most desirable for lunatics, and all who can should be induced to work; but we would rather see them set to labour away from an asylum and settled among a sane population, than in association with other lunatics more turbulent than themselves. There would seem to be a notion that persons suffering from mental disease are like wild elephants, who may be most readily tamed by association with subdued individuals of their own order. This is a remnant of the obsolete hypothesis about insanity, and ought to be discarded. A lunatic is much more likely to derive benefit from the discipline of a sane fraternity than by being thrust into the midst of a multitude of mad people. It may be needful, on account of the great expense of dealing with the insane individually, or because it is impossible to find more fitting associates, to treat them together; but the idea of retaining quiet cases in an asylum merely for the sake of example and influence is absurd. Nevertheless we are afraid it exists and exerts not a little influence. The plea most reasonably to be urged in support of the practice is that if a large ward must be filled, it is better to include tractable cases in the crowd than to convert the population into a mass of mutually destructive morbid furies. This is true, but the fact shows nothing beyond the wisdom of choosing the lesser of two evils. It seemed desirable to say thus much upon a point which has been thrust into undue prominence. We do think it would be desirable, on economic grounds, if it were practicable, to remove all the chronic cases from asylums; but it would neither be fair to those deemed incurable to cut them off from the chances of cure, nor, under the existing conditions of treatment in herds and overcrowding, just to the victims of acute attacks to leave them alone. Meanwhile, at least one-third of the cases now thrown together in county and borough asylums should be eliminated, and we believe they might be provided for by being boarded with relatives under proper supervision, as suggested by the Commissioners, or sheltered in suitable wards, with a liberal dietary, in workhouses. The only safe plan would be to make establishments for "chronic" cases houses-of-ease to asylums, to prohibit the reception of cases at these institutions which had not first passed through an asylum; in short, to sever such establishments wholly from the Local Government and Poor-law system, and attach them to the lunatic asylum system, under the direct control of the Commissioners. As matters now stand it is a question whether magistrates in Quarter Sessions should not be empowered to allow the visiting committees of crowded county and borough asylums to build or hire houses which might be utilised as supplementary establishments, with the power of moving their patients from the asylum to the house-of-ease without affecting the legal position of the patient so transferred, or the responsibility of those to whom his care had been confided. Probably the time may come when such a scheme will be adopted, combining with the advantages of a madhouse the means of isolation in cases of epidemic disease, and the possibility of giving convalescents many personal advantages. This is the only way in which the extension of asylum accommodation can be carried further, at least in Middlesex and Surrey. The "Metropolitan Asylums" for imbeciles we hold to be sources of peril to the community. The sooner they are diverted from their present purpose the better for the welfare of the pauper class, the safety of those on the borders of insanity, and the pockets of the ratepayers.

Looking at the asylums generally as they stand, it is difficult to determine what ought to be done with them. The older buildings have already cost much—considerably more than the original outlay—in alterations, and at this moment their construction is nearly in every case irremediably faulty and fatal to the proper classification of their inmates. How much may be accomplished by skill in adaptation, perseverance, and liberality we have seen in the course of these inquiries. But nothing can prevent the work of reconstruction and improvement from being almost ceaseless, and in the long run exceedingly costly. Nor can the effort to improve be entirely successful. Perhaps the most striking example of the extent to which a badly-constructed asylum may be modified and rendered comfortable will be found at Wakefield, where, by refurnishing and refitting with a single eye to the comfort of the inmates, one of the most antiquated and ill-constructed of houses has been converted into one of the most commodious. The efforts made at Bethlem, Hanwell, in parts of Colney Hatch, and the old buildings at Brookwood, deserve warm recognition, although they fall notably short of Wakefield in respect to the extent to which the domestic comfort and surroundings of the resident population have been considered.

It will be convenient, next week, to touch on the leading points affecting the lodging, maintenance, and discipline of an asylum in order.

(To be continued.)

EXAMINATIONS AND THE MEDICAL COUNCIL.

THE table showing results of Professional Examinations for Degrees, Diplomas, and Licences, granted in 1875 by the bodies in Schedule (A) of the Medical Act, which was recently presented to the Medical Council, is of more than average interest. It is, however, difficult to comprehend the full meaning of the table except by careful perusal and analysis. In the United Kingdom there are twenty-one medical examining boards, seven of which are in England, nine in Scotland, and five in Ireland. It should, however, be noted that the Royal College of Physicians and the Royal College of Surgeons of Edinburgh in one instance, and the Royal College of Physicians of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow in another, co-operate to confer their respective double qualifications; so that although there are in Scotland but seven independent licensing bodies, there are nine examining boards; and in the United Kingdom there are really only nineteen licensing bodies.

We shall on this occasion consider only the statistics of the final examination, partly because we hope on some future occasion to treat in detail of the first professional examinations, and partly because the table before us does not furnish sufficient data for an analysis of the earlier examinations, inasmuch as some bodies require only one examination before the final, and others two.

Confining ourselves to the results of the final examinations, it may be stated that during the past year 2257 can-

didates presented themselves for examination, of whom 514, or 22·77 per cent., were rejected. From these 2257 we may, for our present purpose, dismiss 107 who presented themselves for the Licences in Midwifery, of whom 5, or 4·67 per cent., were rejected. It may be, however, incidentally remarked that while the Royal College of Surgeons of England made 10 licentiates, with an average of 16·6 per cent. of rejections, and the Royal College of Surgeons of Ireland 15, with an average of 11·8 per cent. of rejections, the King and Queen's College of Physicians in Ireland made no less than 77 licentiates, with an average of 1·28 per cent. of rejections.

Omitting the Licentiates in Midwifery, 1641 persons received a degree, diploma, or licence to practise medicine and surgery separately or combined, whilst 509, or 23·67 per cent., were rejected. These numbers may be apportioned as follows:—768 to England, with 196, or 20·33 per cent., rejections; 509 to Scotland, with 189, or 27·07 per cent., rejections; and 364 to Ireland, with 124, or 25·4 per cent., rejections. From this it will be seen that, contrary to the prevalent opinion, the highest percentage of rejections was in Scotland, and the lowest in England. The reason for this does not at present really concern us, but one fact stands prominently forward,—namely, that the Society of Apothecaries of London have, during the past year, made not less than 226 licentiates, with only 9, or 3·8 per cent., rejections. Exclusive of the Apothecaries' Hall the English statistics would stand as follows:—542 passed, and 187, or 25·65 per cent., rejected.

Altogether, 648 Members of the various Royal Colleges of Surgeons or Licentiates in Surgery have been admitted, with 248, or 27·67 per cent., rejections, which may be classified as follows:—

	Passed.	Rejected.	Percentage of Rejections.
R.C.S. Eng.	369	129	25·9
R.C.S. Edin.	45	18	28·5
F.P. and S. Glasgow	21	14	40
R.C.P. and R.C.S. Edin.	71	40	36
R.C.P. Edin. and F.P.S. Glasgow	20	10	33·3
R.C.S. Ireland	122	37	23·27

Respecting the Fellows, a curious contrast between the Royal College of Surgeons of England and the Royal College of Surgeons of Ireland presents itself. While the English College admitted 21 Fellows, with 17, or 44·73 per cent., rejections, the Irish College admitted 3 Fellows, without any rejections whatever.

The College of Physicians and the Societies of Apothecaries have, during the past year, admitted 500 Licentiates, with 110, or 18·03 per cent. of rejections, the relative proportions being as follows:—

	Passed.	Rejected.	Percentage of Rejections.
R.C.P. Lond.	86	21	19·6
S.A. Lond.	226	9	3·8
R.C.P. Edin.	98	60	38
K. and Q.C.P. Ireland	67	16	19·28
S.A. Dublin	23	4	14·8

The Royal College of Physicians of London has admitted 15 members, with 1 rejection, or 6·25 per cent.

Turning to the University degrees, it is not quite so easy to consider the statistics of the table. In some instances, the returns of the Bachelor of Medicine examinations include those also for the Master of Surgery. We have, however, endeavoured to follow as closely as possible the official report.

During last year 72 persons obtained the M.B. degree, while 22, or 23·4 per cent., were rejected—namely:

	Passed.	Rejected.	Percentage of Rejections.
Oxford	6	0	0
Cambridge	6	6	50
Durham	2	0	0
London	19	9	32·14
Dublin	39	7	15·217

For the M.B. and M.C. degrees there were 186 successful competitors, against 32, or 14·67 per cent., who failed.

	Passed.	Rejected.	Percentage of Rejections.
Aberdeen	60	13	17·8
Edinburgh	84	10	10·6
Glasgow	42	9	17·6

For the M.C. or B.S. degrees alone, 71 were successful; while 33, or 31·73 per cent., failed. These were apportioned as follows:—

	Passed.	Rejected.	Percentage of Rejections.
London	7	0	0
Dublin	26	6	18·75
Queen's Univ., Ireland	38	27	41·5

No less than 125 persons have obtained the degree of M.D. from the British and Irish universities during the past year; while 46, or 26·31 per cent., were unsuccessful. It is important to bear in mind, however, that whilst at some universities the degree of M.D. is obtained only after an ordinary examination, at others it is granted on an essay or thesis, and at another by promotion. The following table shows the relative proportions:—

	Passed.	Rejected.	Percentage of Rejections.
Oxford (essay)	2	0	0
Cambridge	2	0	0
Durham (essay)	1	0	0
London	6	4	40
Aberdeen (by promotion)	31	0	0
Edinburgh (thesis)	17	3	15
Glasgow (exam.)	0	3	100
Glasgow (thesis)	11	7	38·8
St. Andrews	9	2	18·18
Queen's Univ., Ireland	46	27	37

Finally, it may be remarked that although the table before us affords much valuable information, it fails in some respects to set forth all the facts connected with the examinations. It would be well, for example, to have more precise knowledge of the average number of times that candidates present themselves for examination. Further, the average number of years devoted to professional education should also be made known. Without these facts it is impossible to estimate accurately the relative value of the statistical returns. Another difficulty presents itself in comparing the results of the examination of the various examining bodies; for, while at one board all the candidates are tested by the same examiners, and the standard is consequently tolerably uniform, at another the candidates are distributed among a large number of examiners, whose tests necessarily vary greatly. At the examinations of the Royal College of Surgeons of England, the degrees of fitness of two given candidates may be beyond comparison, and yet it is not unknown that a good man may fail, because the test to which he has been submitted has differed in style and in character from that against which a more fortunate but less accomplished colleague successfully prevailed.

LEAD-POISONING.

To the Editor of THE LANCET.

SIR,—That there is need for the exercise of greater precautions than are at present employed in the lead manufactories of London abundant proof is afforded daily. Only last week I had two patients under my care at St. Bartholomew's Hospital suffering from plumbism, both of whom were employed in the same manufactory, and I fear that the spectacle of men prematurely old or crippled for life will continue to be witnessed until more stringent rules as regards cleanliness, the removal of noxious vapours, &c., are enforced. The plan which was suggested in your columns some time ago strikes me as being likely to put a stop to the wholesale saturnine poisoning at present going on—namely, that manufacturers should be fined for every case of lead-poisoning occurring in their works. While I am on this subject I may mention another class of mechanics who are exposed to the deleterious influence of lead, and whose liability to it has not hitherto, so far as I know, received the attention of the medical profession. I allude to shoemakers who make use of a leaden lapstone on which to hammer the leather. Within the last month I have had three men apply to me for treatment whose disease has been contracted in the manner specified above.

I am, Sir, your obedient servant,

F. DE HAVILLAND HALL, M.D.

Queen Anne-street, 1st June, 1876.

THE LANCET.

LONDON: SATURDAY, JUNE 17, 1876.

THE most severe criticism that can be passed on the General Medical Council is to say that the consideration of the great subject of medical education has been again put off. The responsibility of the Council for the great inefficiency in the present methods of medical education is very great, and it increases year by year. Of course there are ample means by which those who thirst for medical knowledge may acquire it, and distinguish themselves at the higher examining boards. All laws and regulations for them are superfluous. Such persons are a law to themselves. It is the rank and file of medical students that need the consideration of the General Medical Council, but up to this time the Council has not seriously dealt with the problem of the best way of utilising the four years of medical study which it requires of the student. It has taken some pains to secure better tests of preliminary education, though, according to one of the oldest members of the Council, and one who has given much time to the study of medical education—Dr. AQUILLA SMITH,—"the majority of the preliminary examinations are arrant shams." The Council has not attempted a visitation of the preliminary examinations it recognises, and yet it is obvious that the medical education of students will never be satisfactory till their preliminary education is sound. Dr. AQUILLA SMITH was not alone in his testimony as to the deplorable inefficiency of many of the preliminary examining boards. Mr. MACNAMARA called attention to the subject. Dr. HALDANE on the last day of the session made a very important speech on the question, based on his long experience as an examiner both in preliminary and professional subjects. His words should be noted. In Edinburgh, speaking chiefly for the corporations, the standard for the preliminary examination was not high, but it was uniform. It was the minimum fixed by the Council, and yet a very small proportion of the candidates were able to pass the first time. The knowledge of English could only be said to be moderately satisfactory, and a certain number were rejected every year for deficiency in spelling. In Latin the deficiency was positively deplorable, not more than a fifth or a fourth passing the first time. Dr. ANDREW WOOD bore similar testimony.

Here, then, is unanswerable proof that the preliminary education of students is still in a very unsatisfactory state. This is the work upon which the Council had most prided itself. It admitted that it had never gone thoroughly into the question of medical education proper, but it had faced the subject of preliminary education and settled it. Now, we have excellent witnesses from Scotland and Ireland testifying that the examinations are deficient, and that candidates are allowed to pass whom the examiners of the medical boards would gladly afterwards arrest on the score of their ignorance of English and even of spelling. Similar testimony is not altogether absent as regards England, though there was no time to go into it at the recent meeting.

If things are so unsatisfactory as regards preliminary education, they are not a great deal better as regards professional. And here the Council is, as we have said, in a much more highly responsible position. It may say with some show of reason that it has to take the preliminary education of students as it finds it, and that it is no part of its duty—at any rate that it cannot spare time—to reform the school system of the country, which turns out such uneducated pupils. But the Council has not this excuse for itself in connexion with bad medical education. It is, *par excellence*, the Council of *medical education*, created by Parliament and endowed with powers to require of the several colleges and bodies in the United Kingdom information as to the courses of study and examinations to be gone through in order to obtain the respective qualifications mentioned in Schedule A. In case of it appearing to the Council that these courses of study or examination are not such as to secure the possession by persons obtaining such qualifications of the requisite knowledge and skill for the efficient practice of their profession, it has the power to represent the same to Her Majesty's most honourable Privy Council. These are the very highest and most important powers with which the Council has been entrusted. How have they been used? Very lightly indeed. It will be seen that the Medical Act makes the Council responsible for supervising the courses of study and the examinations not only for the lower qualifications specified in Schedule A, but for all the qualifications, including the Fellowships of Colleges and the highest degrees of universities. But the Council has never seriously faced its great duties as regards medical education. It has instituted very lately certain admirable visitations of examinations, but into the details of the process by which medical students are prepared for those examinations, and by which medical men are made to supply the great wants of the country, the Council has, up to this time, deliberately not gone. Everything seemed ready for such an inquiry at the last meeting of the Council. The first programme contained all the material for a most valuable discussion. The examinations had been reported on by the Council's own visitors; the bodies had had the opportunity of replying to the criticism of these reports; the recommendations of the Council had been revised by a Committee of the Council, and the opinions of the bodies taken upon them; the returns of the examining bodies had been tabulated for a series of years, showing exactly where medical education failed. Dr. ANDREW WOOD showed the Council that an increasing number of rejections was taking place in his body, as in most others. Above all, seventeen or eighteen years had elapsed without the Council facing the subject of medical education, shown to be urgent. And yet instead of taking the subject first it was put off to the last, and finally postponed to another year. It will not do to say that the Council is afraid to go into this subject, and that corporation influences are too great to be overcome. The representatives of the corporations are in a minority—thus, representatives of the Crown are six in number, those of universities eight,

and those of corporations nine. In other words, the influence of the Crown and of the universities is represented by fourteen votes, as against the nine votes of corporations. Not only so, but the representatives of corporations have been just as forward as others to point out the defects of the existing education. If anything, the universities are more to blame for the backwardness of the Council in tackling this great subject, which is worthy of a special meeting of the Council, and of its almost undivided attention for years. It will not be settled for other eighteen years if every conceivable subject is to have precedence of it, and the Council is to spend the best days of the session in discussing subjects which are either obvious or irrelevant.

THE subject of the mode of origin and development of tumours is one which has long occupied the attention of pathologists, the majority of whom have, however, been content to accept the clearly expounded doctrines of VIRCHOW, who attributed to the "connective-tissue cell" properties of heteroplastic change, so that modifications in it alone were at the root of all tumour-formation. Little by little, however, the famous cellular pathology of VIRCHOW has lost much of the restricted scope which its author gave it, and the derivation of several, if not most, malignant growths from epithelial elements is admitted by many; while a few, as Dr. CREIGHTON, would make the epithelial cell to be the progenitor of all tumours, whether sarcomatous or carcinomatous. It will be remembered that last year Dr. CREIGHTON published a preliminary investigation into the etiology of cancer in the valuable scientific reports issued by the Medical Officer of the Privy Council. In that report he dealt chiefly with secondary malignant tumours, and directed attention to the part played by vacuolation of the glandular epithelium of the organ secondarily affected in the formation of new tumour-cells. Vacuolation—in other words, "endogenous cell-formation"—was, he maintained, not only the process by which, in secreting organs, the product of secretion was formed from the epithelial cells of the gland, but it was also the initial stage of the morbid change undergone by the same organ when it became the starting-point of new growth. His paper concluded with the announcement that he was undertaking the investigation of the mammary gland, and the relations of its cycle of periodical changes to the formation of tumours within it. The lately-issued volume of Mr. SIMON'S Reports contains the results of Dr. CREIGHTON'S research in a paper perfectly exhaustive of the subject, and valuable as a contribution to the physiology of the mammary gland equally with its pathology. Aiming at a demonstration that the normal physiological changes of the mamma are represented in the pathological changes, he enters into full detail with regard to the former, contributing much new matter on the subject. It will be necessary to briefly summarise the results of this anatomical research before passing to the author's investigations as to the histogenesis of tumours.

Dr. CREIGHTON'S investigations were pursued at the Brown Institution, and he employed the mammæ of various animals in different stages of activity, his aim being to note the changes that take place in the gland in its involution from the state of activity in which it exists at lactation to its resting state; and also to note the changes which the gland undergoes during its evolution from the state of apparent functional rest to that of full functional activity. He has submitted to examination glands in all stages of these two conditions, and has found a striking parallelism in the processes which lead up to the full state of secretory activity, and those which lead down from that to the inert condition of complete involution. The involutional changes are somewhat as follows: on the cessation of lactation the fully-developed mamma is found to be composed of well-formed acini lined by a well-defined polyhedric epithelium, each cell containing a round nucleus varying in size in proportion to the surrounding protoplasm. At the end of involution, however, the gland tissue is shrunken, the interlobular tissue is largely occupied by fat, and, instead of well-defined cells, the acini are lined by, or rather contain, only round or irregularly oval nuclear bodies, while each acinus is reduced to about one-fourth of the size of an acinus during lactation. These changes, depending upon diminished blood-supply, show how the formative processes are reduced to a minimum in proportion as the functional activity of the gland decreases, and the intermediate stages between the two extremes of full secreting activity and full involution illustrate this fact in a striking manner. If the breast be examined at the middle of the period of involution a large number of the epithelial cells will be found to be in a perfect state of vacuolation—i.e., that their contents are in great part replaced by a clear fluid material, the nucleus of the cell invested in more or less of the original granular protoplasm being displaced to the periphery. This vacuolation of the cells is, as Dr. CREIGHTON points out, the same process in kind that takes place in the gland when it is in full force of functional activity; it is, however, in the degree in which it takes place and in the deterioration of the products of the vacuolated cells that the essential difference between the two conditions lies. During lactation the vacuolation of the glandular epithelium results in the formation of the colostrum corpuscle, which is utilised in the milk; but when the products of vacuolation are no longer required to be used up as milk, they are found simply as cellular waste, to be taken up by the lymphatics. This cellular waste in the involuted mamma is composed of two varieties of cells—viz., small round cells which accumulate within and infiltrate the tissue between the acini, and large granular cells of a bright-yellow colour, perfectly characteristic, which also are massed within and around the acini. Thus, even when it is no longer called upon to act, there is a constant renewal of the epithelium of the mammary gland, and a transformation of this into cells, unlike the parent epithelial cell, and also unlike the colostrum corpuscle, but derived from the former by an endogenous process similar to that which gives rise to the latter. They are, however, waste products, at least so far as the milk-secreting function is concerned. Yet their presence seems to show that a formative stimulus is still acting upon the gland.

Precisely similar changes, distributed in reverse order, take place in the gland during its evolution into the state of full secreting activity, as obtains at the end of pregnancy. During the earlier periods of pregnancy, the mammary gland being in what may be styled the first stage of

evolution, there is but little apparent difference between it and the involuted gland. The epithelium may be as small and nuclear as it is in the resting state, but the number of large yellow cells is very great, both within the acini and in the submucous tissue. In the second stage of evolution the cells lining the acini, although still of small size, are yet arranged in a more orderly manner, and now no longer are the large waste cells found, the bright yellow pigmentation of which forms so striking an object in specimens obtained from the involuted gland. On the other hand, a breast at this stage shows the interacinous tissue to be largely occupied by a growth of spindle-cells. By a strict follower of VIRCHOW such a formation of spindle-cells would be regarded simply as evidence of increased overgrowth of the connective tissue of the gland proceeding in harmony with its functional development. Dr. CREIGHTON, however, contends against the view that these spindle-cells arise from connective-tissue corpuscles, but holds that they belong to the same category as the large yellow cells which were distinctly epithelial products. Like these cells, he believes that the spindle-cells are the results of endogenous cell-formation of the glandular epithelium. They are as much "waste products" as the yellow cell so often mentioned, and have nothing in common with the connective tissue beyond their situation between its meshes. This contention for an epithelial mode of origin for spindle-cells is at the root of the position assumed by Dr. CREIGHTON with regard to the development of morbid growths, and is one which has lately received confirmation at other hands. In the third and final stage of its evolution, as the mammary gland approaches its full term of development, the acini become fully formed, and the process of vacuolation is seen to be very active. The fluid contents of the vacuoles are at first composed of mucus, but later this gives way to milk, and fully-formed colostrum corpuscles are thus produced from epithelial cells, which are renewed with great rapidity.

Thus, as Dr. CREIGHTON points out, there is an exact parallelism between the process of involution and that of evolution of the mammary gland, as regards the production of waste cells; this depending simply upon the degree of functional activity of the gland, with which the formative activity keeps pace. The characteristic pigmented cells, the last of the series of waste products which are thrown off in involution, are the first to make their appearance on the renewal of the stimulus which again calls the gland into activity; then they disappear, to give way to the production of a large number of nucleated bodies, which, crowding together in the interfascicular connective-tissue spaces, assume a spindle shape. Finally, the same process which has led to the production of these bodies shows itself in the typical vacuolation of the epithelium, resulting in a mucoid and then in a milky secretion; whilst the epithelium-cells that are not so transformed assume the shape of perfect polyhedra. Dr. CREIGHTON enters at length upon the manner in which the cellular waste is disposed of—namely, by means of the lymphatic system—and his description includes a detailed account of the histology of lymphatic glands.

The application of these facts upon the normal changes in the mammary glands to explain the histogenesis of pathological products forms the rest of Dr. CREIGHTON's paper. As, however, to do full justice to this will require more space than can now be devoted to it, we shall return to this subject again, when we shall take occasion to refer to one or two other contributions to our knowledge of the subject of "pathological histogenesis" recently made in this country.

THE Merchant Shipping Bill of 1876 has, after a vast amount of relevant and irrelevant discussion, at length passed through Committee, and may be now said to present substantially its permanent form as an Act. All matters relating to the condition of seamen have, wisely or unwisely, been scrupulously shoved out of the Bill, which relates solely to seaworthiness of ships. An important clause existed in the original draught that, had it become law, would have in effect rendered the medical examination of seamen, before signing articles, compulsory. The wording (and, therefore, future operation) of this clause was strongly objected to by the committee of shipowners formed in London some months ago to discuss the Bill, in that it pressed unfairly upon those owners who desired to have their crews examined. As a result, the entire clause was expunged, and a distinct promise was given by the Chancellor of the Exchequer, the Home Secretary, and the President of the Board of Trade, that a Bill relating exclusively to the condition of seamen should be introduced by the Government next session. So far so good. We have just legislated for the inanimate item, and may turn our undivided attention to the vital material of a ship's belongings. It is well that each should form the subject of a distinct Bill, though it is a moot question whether safety at sea is better compassed in an unseaworthy ship with seaworthy sailors or in a seaworthy ship with sailors physically unable or incompetent to keep her within any reasonable margin of safety.

We recur, however, to the Merchant Shipping Bill, because the last few nights on which it was discussed produced some very important expressions of opinion relative to the sanitary condition of seamen. Scurvy, dietary scales, and inspection of food and medicines, were all touched upon in detail. Scurvy has very lately received ample notice in these columns, and its primary causes are stated succinctly enough in a short article on the subject by Dr. HARRY LEACH that appeared in THE LANCET of May 27th. But we may fairly ask, with Mr. THOMAS BRASSEY, why were not the reports as to the outbreaks of scurvy on board the *Royal Sovereign* and other ships in the hands of members weeks ago, so that they might have been utilised in Committee? The report on the *Royal Sovereign* was asked for by Dr. WARD, and promised by Sir CHARLES ADDERLEY in the middle of February, and it is within our knowledge that the official inquiry was closed and the report sent in to the Board of Trade before the end of that month. And yet it was not possible (or shall we say politic?) to print this document in a month, although all interested in the question knew that it contained matter specially germane to the subjects discussed. As to scales of diet, we have always maintained, as indicated in the article above referred to, that such revised scales of diet, varied in character, and suitable for different voyages, should be adopted either voluntarily or compulsorily, as shall entirely supersede—i.e., render unnecessary—the regular admi-

nistration of lime-juice. All who spoke upon this subject in the House a month ago were entirely agreed on this head, and it is indeed surprising that shipowners have not found it long ago to their commercial advantage to take the matter in hand, and so assist to rid themselves of an incubus detrimental alike to pocket and prestige. The inspection of food and medicines was introduced by Mr. PLIMSOLL, who argued that the same line of action should be applied as in the case of emigrants, and who had sufficient influence to divide the House, though unsuccessfully. We doubt very much whether Mr. PLIMSOLL, in his anxiety for the production of seaworthy ships, has had much time to learn the constituents of a seaworthy sailor, or the means by which he may be kept in a good state of repair. The junior member for Derby appears, up to the present time, to have acted on the principle that a ship, if seaworthy, can guide and guard herself, and he has not, we take it, been in many gales off the Cape, or in the China seas. This by the way. We may conclude, on account of the enthusiastic way in which the official survey scheme was received by several shipowners, that the latter are glad to be relieved of responsibility. But we doubt at present the wisdom of this wholesale inspectorial scheme in respect of provisions, at all events until the results of new dietary scales are fairly shown. Drugs sent to sea for the use of the crew, where no surgeon is carried, should most certainly be examined, as gross adulteration is often practised. Shipowners are helpless, and honest dealers as well as seamen are directly or indirectly victimised.

The expunged clause of the present Bill relating to the medical inspection of seamen need not again be discussed at length, because, as we believe, both shipowners and legislators are convinced of its necessity and expediency. Sir CHARLES ADDERLEY told the House the other day that the subject of scurvy was occupying the serious attention of the Board of Trade, and we may hope that other materials of the forthcoming Bill will be gathered during the next six months. And, as seamen as well as ships are at least likely to be dealt with in a practical manner, it may not be too much to hope that the Contagious Diseases Acts may soon be applied in all mercantile as well as Royal naval ports, and that some provision may also be made in aid of the old *Dreadnought* Hospital at Greenwich, and of other hospitals in our outports constructed and maintained for the exclusive benefit of sick seamen.

Annotations.

"Ne quid nimis."

UNIVERSITY DEGREES AND SENIOR PRACTITIONERS.

THE letter of "A Cambridge Graduate," which we publish to-day, recalls our attention to a grievance which has frequently been discussed in our columns. Senior practitioners are often writing to us complaining of the impossibility of obtaining a degree in medicine in after-life, except on ruinous terms, if they wish to pass from general practice to the higher grade of physicians. The grievance is a real one, and presses hardly on a very large class of deserving men, who framed their early career in life either in accordance with their poverty, or the advice of friends, or conditions of health. One may have commenced perhaps hardly knowing if his means would be sufficient to carry him through his medical curriculum, and has eked out his scanty means by undertaking the duties of assistant to some general practitioner in the neighbourhood of his hospital. Another has a practice waiting for him, and it is necessary for him to qualify at once by the quickest process. Or a father wants his son to come and help him in his practice, and refuses the boon of a university education as likely to unsettle him for country practice. Or broken health has frustrated the best-framed scheme of medical study. Later on in life these early difficulties may probably have disappeared, but the practitioner finds himself unable to improve the position these circumstances imposed on him, unless he makes completely a fresh start. It is true the membership of the Royal College of Physicians is open to him under Bye-law 16; but still, as this degree does not confer the right to the title of doctor, it does not help him much.

To remedy this grievance, it has been proposed that the Universities of Oxford and Cambridge should grant degrees to senior practitioners on examination, but without requiring residence, or that the University of London should recognise medical study previous to matriculation. Neither of these propositions do we think practical. It would be manifestly unfair to the regular graduates to throw the *prestige* of an Oxford or a Cambridge degree open on such easy terms, and such a proceeding would in time tend to induce many men to postpone graduation till they were qualified by age rather than seek it earlier by residence. The second proposition would be a valuable concession to younger men, but we very much doubt if middle-aged men would venture to face such an ordeal as the examination for the Preliminary Scientific and second M.B. undoubtedly is.

The course that appears most feasible and least open to objection is, either for the various universities to agree and grant conjointly an honorary degree in medicine to any member of the Royal College of Physicians (on the recommendation of the President and Council of that body) who shall have been admitted under Bye-law 16—on the distinct understanding, however, that the use of such degree shall not imply that the holder has graduated at any special university;—or, if the universities could not be brought to give a unanimous consent to such a procedure, the Medical Council might obtain powers to grant the title of M.D. to all persons who had obtained the membership of the Royal College of Physicians under the conditions above stated. The adoption of one or other of these courses would remove the objections that have been urged against the wholesale admittance of men to university degrees. The graduates of Oxford, Cambridge, and London would still be able to point to their distinctive titles, as showing that they had undergone a special course of training and study; whilst the possessor of an M.D. (Hon.) would be proud of a degree which would show that his claims were based (to use the words of Bye-law 16) not merely on testimonials "satisfactory as to his moral character and conduct and his general and professional acquirements," but, further, showing "that he had improved the art or extended the science of medicine, or had at least distinguished himself highly as a medical practitioner."

MIDWIFERY AT THE COLLEGE OF SURGEONS.

As we announced last week, an important discussion took place at a meeting of the Council of the Royal College of Surgeons of England, held on the 8th instant, respecting examining women for the certificate of qualification in midwifery. On the representation of the Lord President of the Privy Council that some legislation respecting the ad-

mission of women into the medical profession may be confidently expected before the end of the session, it was resolved to postpone any further action in this matter.

It may not be out of place to refer here to a question which has been mooted respecting the rights and privileges of persons holding the certificate of qualification in midwifery alone. It is well known that the so-called licence in midwifery is, according to the Medical Act of 1858, a registrable qualification, and that persons holding this licence, by becoming registered, possess a parliamentary recognition and a legal right to recover their fees. But the question might at any time arise as to what these fees really comprise. It has been hinted that licentiates in midwifery, when registered, may engage in any department of medical and surgical practice. We are, however, disposed to maintain, subject to a contrary decision of the higher courts, that persons holding the licence in midwifery alone can sue only for fees in midwifery cases, and for medical treatment only when ancillary to such cases. Indeed, the 31st section of the Act distinctly declares that "Every person registered under the Act shall be entitled, *according to his qualification or qualifications*, to practise medicine or surgery," &c. (The italics are ours). If, therefore, we understand this Act correctly, no person holding the licence in midwifery only could recover fees for attendance, &c., for other than midwifery cases. As, however, there has been no legal decision on this matter, the possibility of the question arising should not be overlooked.

We have, from time to time, endeavoured to make our readers acquainted with the real facts concerning the recent attempts to obtain for three female medical students the College certificate in midwifery, and we hope soon to be able to adduce the valuable testimony of the annual report of the President of the College. We have been privileged to see Sir James Paget's admirable and judicial report, but as it is still in proof, and has not yet been presented to the Council, we do not feel justified in discussing it. It is true that a medical contemporary thought fit last week to publish copious extracts from that communication, which was, and still is, to all intents and purposes, private. Whether the report will ultimately appear as it now stands depends very much on Sir James Paget's appreciation of the propriety and value of the suggestions which he has solicited from the members of the Council. It should, however, be distinctly understood that the responsibility of the annual report rests solely and entirely on the President, and that the Council will not even be called upon to discuss it, although Sir James Paget has, with his usual urbanity, expressed his willingness to consider any suggestions that the Council may desire to make. Until, therefore, the report has received official sanction we prefer to regard it as a privileged communication.

DISTRICT MEDICAL OFFICERS AND THEIR GRIEVANCES.

THE medical officers of unions and districts have been troubling Mr. Sclater-Booth with their stock grievances about "pensions" and the "supply of drugs." This is scarcely a profitable enterprise. The President of the Local Government Board is probably the last person in the world able to help them, however benevolent his intentions may be. Nothing short of a movement which will bring the whole question before Parliament holds out any solid promise of success. It is abundantly evident that medical officers of the Local Government Board should be treated as public servants entitled to a permanent consideration for their labours, and not as private practitioners employed casually to perform certain duties for a department or local authorities. It has been demonstrated conclusively, and on many occasions, that district medical officers should be remunerated by adequate salaries, and that boards of guardians should supply drugs. But the very clearness of the proof constitutes an obstacle to the reform towards which it points. After a public authority has persistently sinned against light and knowledge for a lengthened period, something more than the exposure of the error is needed to carry conviction home and produce amendment. We recommend the medical officers interested to begin their campaign afresh. If it were only possible to induce practitioners to display a little less earnestness in the endeavour to obtain parochial appointments, the difficulty of compelling the change they desire would be greatly lessened. It should be shown by the practical bearing of the profession towards the local governing authorities, in this matter, that the duties medical officers are asked to undertake cannot be discharged under the conditions imposed upon them. It is manifestly impossible that the poor should be properly supplied with good drugs at the rate of allowances made for that purpose, even if district medical officers are content to work for nothing, which is scarcely to be expected of them. The experience of many, if not most, officers of workhouses will bear us out in the assertion that the cost of discharging the duty entrusted to them equals, if it does not actually exceed, the annual sum they receive in the shape of salary. It is difficult to add anything to the argument formulated years ago or to strengthen the array of figures and facts by which the plea for better terms was then supported. Nevertheless, if the case can be strengthened this should be done. We earnestly wish the district medical officers success, but it is impossible not to feel a certain amount of misgiving as to the result.

DENTAL ANÆSTHETICS AND "DENTAL SURGEONS."

THE explosion of feeling and remonstrance which has been produced by our remarks on this subject on the 27th ult. could not have occurred unless a formidable quantity of explosive material had existed in a condition to be easily fired by any casual spark that chanced to fall upon it. So much kinetic force implies the previous existence of at least an equivalent of potential energy. Our correspondents on either side need to be reminded of two series of facts—the one relating to the history of the present controversy, the other to our consistent policy as an organ of medical opinion with regard to the specialty of dental surgery and the position of those by whom it is and ought to be practised. We will not dwell on the first topic, as those of our readers who care to understand the occasion of our remarks on the 27th ult. may find the key to all we said, and can scarcely place an erroneous construction on the argument, if they will refer to the letter of Dr. Burney Yeo which appeared on the 29th of April last, and which, apparently, some of our enthusiastic critics have not read. Dr. Yeo's case, or, at least, his complaint, clearly related to the use of anæsthetics by unqualified persons practising dentistry. We condemned this, and we went further. We objected to the practice of "anæsthetists" administering "the gas" for unqualified dentists as unadvisable on many grounds. Dr. Burney Yeo referred to the "Association of Surgeons practising Dental Surgery," and we repeated what we had said on many previous occasions, as to the wisdom of starting and the duty of supporting this new society on grounds ethical and prudential. We did not allude to the qualification in dentistry granted by the College of Surgeons in our remarks; as a matter of fact we had not that qualification in view. Our attitude with regard to the special diploma

is unchanged. Twenty years ago we expressed an opinion that some such qualification was desirable, and the College of Surgeons was a fitting body to give it. We think so still. We made another observation twenty years ago which it may be worth while to recall. There were fears, when this special licence was instituted, that its holders, not being also members of the College, would feel themselves aggrieved by not being placed on an equality with surgeons. We endeavoured to show that while this inferiority of the L.D.S. must undoubtedly exist, it would be simply honest to acknowledge it and vanity to strive for equality. It is strictly in accordance with this opinion that we warmly approve the combination of those who are surgeons first and dentists afterwards. We think now as we thought in 1865, that it is well such a qualification should exist, but, like the midwifery licence, it should be taken after the membership. We do not say that none except members of the College of Surgeons ought to practise dentistry, but only those who are medically qualified can treat a case of tooth disease all through. It is, in fact, much easier to understand an isolated specialty relating to the eye or the ear than to the teeth. No part of the organism is more sensitive, more intimately connected with the general system, or so commonly affected sympathetically with other organs. It is almost impossible to conceive of an independent treatment of tooth disease. All reforms are progressive. At one time bone-setting was a specialty, and the bone-setters and barber-bleeders were opposed to the movement which first introduced educated men into their craft, and then raised it to the dignity of an art culminating in a science. This is what time is doing for dentistry. The unqualified experts must not complain if they are crowded out, or the educated and diplomated dentists if they are gently persuaded to join the profession under whose college they now hold a special, and subordinate because limited, licence.

LORD CARNARVON'S BILL.

THE more carefully this Bill is read and considered the more objectionable does it appear; and this seems to be the opinion alike of those who, like ourselves, were quite willing to support any measure that would have prevented the abuse of animal experimentation, should such have been proved to be necessary after the question had been submitted to investigation by a Royal Commission, as well as of those who have been from first to last opposed to all inquiry as utterly unnecessary and vexatious. That Lord Carnarvon's Bill has not been framed in accordance with the meaning and spirit of the report of the Royal Commission, as generally interpreted, seems clear, for while the latter gave general satisfaction, the former has given universal dissatisfaction to those among the scientific and educated classes of the community qualified to form any opinion on the subject. At the late meeting of the Medico-Chirurgical Society, under the presidency of Sir James Paget, a petition to the House of Lords against the measure, as now drawn up, was agreed to, and signed by a large number of distinguished physicians and surgeons. Their lordships are urged to give a favourable consideration to the amendments of the Bill proposed by the General Medical Council and the Parliamentary Bills Committee of the British Medical Association, and they are especially prayed that such amendments should be made in the Bill, in the event of its passing, as would have the effect—"1st, as regards the title of the Bill, of amending this so that it shall not seem to impute to physiologists and to teachers in medical schools a disposition to cruelty; 2nd, of widening the limits of research by experiment, so as to include, as heretofore, all subjects of research which can conduce to new knowledge of facts or laws of life, or additions to medical and physiological knowledge; 3rd, of permitting the practice of experiments of research in non-registered places by licensed persons or under special certificate; 4th, of omitting the limitation which the Bill imposes on the animals which may be the subjects of experiment, and removing the exemption of cats and dogs which Clause 5 proposes, seeing that the domestic flesh-eating animals are most necessary for many subjects of important inquiry." The petitioners said that "in making these earnest requests they are animated by the sentiments of humanity which are prevalent throughout the nation, and which are especially dear to them whose profession it is to pass their lives in the prevention and cure of suffering and disease. Intimately acquainted with the nature and object of the studies which the Bill proposes to regulate, your petitioners earnestly trust that you will amend, as they now pray, the provisions of this Bill, which threatens to arrest, if not to destroy, in this country, the pursuit and diffusion of a kind of knowledge most necessary for widening and strengthening the bases of medicine, and for multiplying and improving the means by which the laws of life may be more fully learnt, the beginning of disease more readily checked, the action of remedies more clearly perceived, and the art of healing rendered more certain and more beneficent."

AN INQUEST IN HAMPSHIRE.

SOMEBODY should write a "Manual for Medical Witnesses," and practitioners should be asked, on presenting themselves to give evidence, whether they understand the whole duty of man when his vocation in life compels him to undertake the *rôle* of coroner, juror, or witness. We are weary of pointing out the omissions and commissions of people concerned in the origination and conduct of inquests. It should be understood once for all, and kept steadily in view by medical witnesses, that they are expected to know their own duty and the course of procedure which ought to be adopted towards them by the court, the jury, and even by the local beadle, the summoning officer, the coroner, the parson of the parish, and, in short, everybody else. A district medical officer, under the Local Government authority, at Brokenhurst, being called to a husband, incidentally prescribed for his wife. The husband got better, and the wife grew worse. The doctor, attaching more importance to his primary patient than to the secondary client, did not call again until he was sent for, and not then on the first or second message, the demand not being so couched as to imply urgency. When the second visit was paid the woman was dead. The local clergyman, mistaking the case for a parish business, alleged neglect, and, with righteous indignation, promoted an inquest. The coroner first encouraged and then discomfited the vexed and vexatious vicar. A medical man was charged by the coroner to perform a post-mortem examination, and, after he had given evidence, the coroner told the jury that another medical man—who came to give evidence under a strong sense of duty, but who did not seem to understand the legal meaning or force of "offered" testimony — was "of far greater experience"! The coroner proceeded to lay down for the enlightenment of the district that a medical man was not legally bound to attend any case to which he was called—a point not in any way relevant to the inquiry. The question was not whether the medical officer was legally bound to undertake the case, but if, having undertaken it, he had incurred the responsibility of giving adequate attention. The medical officer was wrong in leaving it doubtful whether the case was a parish or private business. No district officer is justified in attending pauper patients without an order from the re-

lieving officer or the production of a card showing that the person he is asked to visit is on the permanent medical list. Again, no medical officer should merge his private practice into his Poor-law duty so that the local clergyman can confound the two. The coroner was certainly at fault, in allowing the parson to assist at the inquest. The medical witnesses were, as usual, misinformed as to their status and their duty. When a witness appears before a coroner and jury without a summons he "offers" his testimony, and the coroner is bound to hear him. No one can *call* a witness at an inquest except the coroner, and no one besides the coroner and the jury (putting questions through their foreman, subject to the veto of the coroner, who is legally and *personally* responsible for the proceedings) can examine a witness. If anything could induce those who are concerned in these inquiries to make themselves acquainted with the law affecting the coroner's court, and to act simply and temperately on its provisions, there would be less confusion and none of those occurrences which help to make the court, as an institution, ridiculous, and its proceedings vain.

THE MEDICAL OFFICER OF HEALTH FOR HARROGATE.

DR. DEVILLE, who lately received notice of dismissal from his appointment of medical officer of health for Harrogate, continues to receive expressions of sympathy from various quarters. It will be remembered that the unfortunate medical officer gave offence to the town sanitary authority by reading a paper dealing generally with evils connected with watering-places, but which the authority construed to be specially directed against Harrogate. Hence the high-handed course of action which the profession in the district are resenting, and which we venture to hope will be yet disavowed by the inhabitants of the town. A special meeting of the committee of the North-Western Association of Medical Officers of Health was held last week to consider the case, when the following resolution, which we have slightly abridged, was unanimously adopted:—

"That the committee of this Association are of opinion that the paper read by Dr. Deville at the recent meeting of the Yorkshire Association of Medical Officers of Health, and afterwards published in the Leeds newspapers, should be considered applicable to all watering-places; and the fact of Harrogate possessing a medical officer so fully alive to sanitary requirements is calculated to give confidence to the public and increase the number of visitors in search of either health or enjoyment. This committee further consider Dr. Deville's paper shows him to be eminently qualified for the duties of his office, and therefore confidently hope that the Harrogate Improvement Commissioners will reconsider their determination, and retain him as their medical officer; and that the secretary be requested to forward copies of the said resolution to the Harrogate Improvement Commissioners, the Local Government Board, and Dr. Deville."

A meeting of the Council of the Yorkshire Branch of the British Medical Association was also held at Leeds for a similar purpose. The following resolutions were passed unanimously:—

1. "That this meeting desires to express its feeling that Dr. Deville has been unjustly treated, in being dismissed from his office, for the simple and honest expression of his experience of the difficulties of a medical officer of health, before an association of medical men engaged in similar pursuits."

2. "That this meeting deprecates the action taken by the Harrogate commissioners, as calculated materially to injure the prospects of Harrogate as a health-resort."

3. "That this meeting feels that the action of the Harrogate commissioners in reference to the dismissal of Dr. Deville furnishes a strong argument in favour of the opinion that no medical officer of health should be dismissed from his office without the concurrence of the Local Government Board."

4. "That this meeting sympathises sincerely with Dr. Deville in the position in which he has been placed by the fearless and honest expression of his opinions."

We thoroughly endorse the third resolution. Dismissal of a medical officer of health should not take place without the concurrence of the Local Government Board, who, of course, would make a full investigation into the circumstances of a case before giving or withholding its approval.

ST. GEORGE'S HOSPITAL.

THE inquiry into the sad accident which occurred at the above-named hospital is not yet complete. Even at the time of going to press a coroner's inquest was being held on the death of one of the unfortunate sufferers. Without entering upon a consideration of the causes of the accident, we may state a few of the facts of the case upon which there seems to have been considerable misapprehension.

If little has been hitherto said it is because there is little to be said until the authoritative report appears. At present the affair looks like a pure accident. The tank which gave way was made of thick plates of cast iron, strongly rivetted together, and supported on solid brickwork and cast iron pillars, while the sides were further held together in the inside by many stout wrought-iron rods. This tank, which was erected seven years ago, was twelve feet high and ten feet square, and capable of holding about 8000 gallons of water, and was examined by the architect of the hospital within a few weeks of the accident, and pronounced safe and sound. Even now, except for the broken side, the body of the tank is securely fixed, and has not stirred in the least.

The details of the accident have been already fully recorded in the daily newspapers, and need not, therefore, be now described. There are, however, some incidents which deserve further notice. Unfortunately two patients, both under the care of Mr. Rouse, were seriously injured, one having since died, the other being at present in a very critical condition. The girl Gomez, who died last week, had been admitted into the hospital with some small fibro-chondromatous tumours about the knees, which, although not of serious import, gave her considerable inconvenience. At the patient's own solicitation Mr. Rouse successfully removed these growths, the wounds subsequently healing by first intention, so that at the time of the accident she was convalescent. When, however, the patient was recovered from the débris after the accident, she was found to have sustained many severe injuries, such as fracture of the humerus and fracture of some of the ribs, while the cicatrices about the knees were found to be torn open, and the wounds filled with mortar. For a few days she seemed to progress satisfactorily, but four or five days afterwards symptoms of blood-poisoning occurred, which were soon followed by those of pleuro-pneumonia, to which she ultimately succumbed. The other patient had been operated on by Mr. Rouse for cystic disease of the breast, and in this case, too, the wound united by first intention. Early in the accident this woman seems to have been rendered unconscious, for although she sustained a severe fracture of the skull, apparently produced by a repetition of blows, she was insensible when picked up, and had no knowledge or recollection of what had occurred. This patient, too, had the wound torn open, and after progressing well for a time, presented evidence of blood-poisoning, followed by pleuro-pneumonia, and for some days her life has been despaired of. Although many other patients were hurt, none were seriously injured.

In Wright's ward, the bed on which a little girl was lying under treatment by weight and pulley for disease of the hip-joint, was actually hanging over the chasm made

in the floor. From this perilous position the child was rescued by Mr. Wilson, the house-surgeon, who courageously rushed into the ward, cut the cord attached to the pulley, and carried away his patient in safety. Indeed, nothing can be more gratifying than the unanimity with which every eye-witness commended the calmness, the intelligence, and the energy displayed alike by those students whose lives had been so seriously imperilled, and by those who had been attending to their routine duties in the hospital. One witness publicly declared his sentiments in the following words:—

"I was particularly struck with the earnest and business-like manner in which the students at once set to work, despite all the water and rubbish, to get at the sufferers with considerable risk, as the timbers overhead were in an ugly state; two young gentlemen who had jumped from the windows, bruised and wet through, doing their best."

THE MEDICAL COUNCIL AND THE MEDICAL DEFENCE ASSOCIATION.

DR. ANDREW WOOD and Sir William Gull showed good judgment in asking for due consideration to a memorial from the Medical Defence Association setting forth the necessity for an amendment of the 40th clause of the Medical Act. The memorial asserts that no means exist which can be made use of to prevent the assumption of medical titles by unqualified persons. This is not absolutely correct, for convictions are every now and again obtained under the clause. But it is true in the sense that the clause is unreliable and capable of evasion from its looseness in various ways, especially if the accused can show that whatever titles he used he did not pretend to be registered, or distinctly stated that he was unregistered. The clause is so useless that the Medical Defence Association has preferred to use the Apothecaries Act for purposes of prosecution. It has been very successful in this way, and has given fresh interest to that Act. The Defence Association deserves the support of the profession and the help of the General Medical Council in procuring an amendment of the Medical Act to the following effect:—"Any person whose name is not on the Medical Register, who shall take or use the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, master of surgery, bachelor of surgery, surgeon, general practitioner, or apothecary, or any name or title, or addition, implying that he is qualified to practise medicine or surgery, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds."

POLLUTION OF RIVERS.

MR. SCLATER-BOOTH last week asked for leave to bring in a Bill for the better prevention of the pollution of rivers, stating that the time had arrived when, if ever, some action should be taken in the matter. We quite agree with Mr. Sclater-Booth as to the urgency of the question, and we felt surprised that the Bill formed no part of the original programme of the Government, and was not alluded to in the Queen's Speech. It is much to be regretted that such an important subject should be introduced so late in the session, when the time is so limited that, if the Bill passes, it will be without the consideration it deserves; and if, as is sure to be the case, discussion and criticism are evoked, the Bill will have to be abandoned, like that of last year. In the present measure it is proposed to take up the question where it was left last session. The Marquis of Salisbury's Bill, it will be remembered, proposed to enact generally that the rivers were to be kept clear from pollution, and that to pollute rivers was to be a statutory offence under the Act. It was to be prohibited to cast solid matter—whether from mines, or manufactories, or from whatever source—into rivers in a way that would either pollute the stream or have a tendency to impede the navigation. It also dealt with the mode of disposing of the sewage of towns; it proposed to render the pollution of rivers from this source a statutory offence, but it gave ample time, before prosecutions were instituted, to enable towns to render their sewage innocuous. The general scope of the Bill was satisfactory, but unfortunately it contained so many clauses granting exemptions in special cases, and affording so many loopholes by which an offending manufacturer or sanitary authority could escape, that practically, as regards the effectual freeing our rivers from pollution, the Act would have been entirely nugatory. On the other hand, many of the enactments were decidedly unjust, since they dealt unequally with individual interests. The measure met with such determined resistance in committee that the Government resolved to withdraw it. We find that these obnoxious clauses have undergone considerable modification since last year, and that there is some chance of passing a satisfactory measure, either this or next session, that shall compel our sanitary authorities and manufacturers to adopt some method for dealing with their refuse otherwise than by casting it into the rivers. If Government shows a determination on this point, and presses it on all alike, without fear or favour, we have little doubt that a satisfactory means of dealing with manufacturing and sewage refuse, otherwise than by river disposal, will soon be adopted.

THE ELECTIONS AT THE ROYAL COLLEGE OF SURGEONS.

THERE is little likelihood of a lively contest at the ensuing annual election of members of the Council of the Royal College of Surgeons. There will be four vacancies, caused by the retirement of Messrs. Simon, Humphry, and Holden, and by the death of Mr. George Southam, of Manchester. The three gentlemen first named have expressed their willingness to seek re-election, on which they may each safely reckon. The contest will, to all appearances, be for the fourth seat. There are three candidates, all good men and true—Mr. Hussey, of Oxford; Mr. Wheelhouse, of Leeds; and Mr. William Adams, of London. There is, we believe, a strong feeling on the part of the provincial Fellows, that there should be another representative from the country, and no doubt a strong effort will be made to carry Mr. Hussey or Mr. Wheelhouse. There are, however, many who will not be disposed to overlook the strong claims of Mr. William Adams, of the Great Northern Hospital, whose writings have done so much to advance orthopædic surgery in this country. We understand that Mr. Henry Smith, of King's College, intended to stand in his turn for election this year, but that, on account of the recent deplorable loss of his son, he has determined to postpone his candidature.

THE NECESSITY OF POST-MORTEM EXAMINATIONS.

THE Coroner for Central Middlesex and the foreman of a jury which assembled in Somers-town on the 26th ultimo, had an edifying difference of opinion as to the necessity of a post-mortem examination. The case was as follows:—George Reed, aged thirty-seven, who had been suffering from bronchitis, and had been attending at University College Hospital (whence three days previously he had been discharged as convalescent), was found dead on the floor of his room with a little blood on his face. The coroner remarked "that he had not the slightest doubt that there was tubercular disease of the lungs, and that the cause of death was a natural one. The jury had already got the

common-sense view of the matter, and if they were satisfied that the death was a natural one, they need not trouble themselves about the pathological cause. Sometimes people suffering from bronchitis broke a bloodvessel with coughing, and it might have been so in this case. The medical profession were riding a hobby in trying to make out that there must be post-mortems in many cases that could be settled without." The medical witness (Mr. Burton) declined, however, to express an opinion without sufficient grounds, and very properly maintained that the mode of death was not that which was usual in bronchitis. The foreman of the jury was of the same opinion, and refused to be satisfied with the suppositions of the medical coroner; and, on evidence being tendered by the wife of the deceased that he had never been well after taking a certain dose of medicine, the coroner said: "I think you had better adjourn the case now for a post-mortem, and to have the fluid analysed." It is to be hoped, however, that the county will not be put to the expense of an analysis until the post-mortem examination shall have shown it to be necessary.

THE SANITARY CONDITION OF BETHNAL GREEN.

A FEW months since the vestry of Bethnal-green lost, through death, the services of their medical officer of health, Dr. Sarvis, and pending the appointment of his successor a local practitioner (Mr. Welch) undertook the duties of the office. Now that Mr. G. P. Bate has been duly appointed medical officer of health for the district, Mr. Welch has furnished a report calling especial attention to the improvement in the sanitary condition of the parish during the past thirty years, and attributing it to the excellent sanitary arrangements of the vestry. He further states that where zymotic diseases were formerly prevalent there is now scarcely any disease to be found. The Sanitary Committee are especially eulogised for their "great vigilance and skill in their useful and arduous labours." These remarks were naturally very acceptable to the vestry, and they were ordered to be entered on the minutes. Now, we do not doubt that the sanitary condition of Bethnal-green has much improved during the past thirty years, but it is to be hoped that the zeal of the vestry and of the new medical officer of health will not be checked by Mr. Welch's report, which appears somewhat too rose-tinted. The parish of Bethnal-green had a population which may be estimated at about 127,000 in the middle of the year 1875. During that year, of 3094 deaths from all causes registered in the parish, 577, or 19 per cent., resulted from the seven principal zymotic diseases; whereas in the neighbouring district of Whitechapel the proportion of deaths from these principal preventable diseases was but 11 per cent. It would be easy to adduce other facts pointing as strongly to the conclusion that the sanitary authority of Bethnal-green has not yet reached that stage in its labours when it can afford to "rest and be thankful."

INTERNATIONAL MORTALITY STATISTICS.

A LETTER recently published in *The Times* from Dr. Aitken of Rome throws much light upon the cause of the exaggerated reports of the prevalence of fever in that city. It appears that the large number of deaths which have recently been referred, in the official Roman weekly returns, to "eruptive fevers," have not been deaths from fever, but the result of an "epidemic of small-pox combined with a fatal type of measles." It is not easy to comprehend why such a mode of classification should have been adopted, as till recently deaths from small-pox and measles were correctly distinguished in these returns. Carefully prepared mortality statistics have been published regularly in Rome since it became the capital of Italy in 1871, and these statistics prove that in recent years the proportion of deaths from zymotic diseases has considerably declined. The value of these international mortality statistics, for which England may justly take the credit of initiation, increases day by day, and the false reports of the fatal prevalence of fever in Rome only afford evidence of the mischief which may arise through a want of clearness in the statement of facts. It is to be hoped that deaths from small-pox and measles will no longer be described in the Roman returns as deaths from "eruptive fevers."

IRISH MEDICAL ASSOCIATION.

THE annual general meeting of this Association was held on the 5th inst. in the Library of the Royal College of Surgeons, when a resolution was passed advocating superannuation allowances to Poor-law medical officers, not less than two-thirds of their official emoluments, claimable to those who had served twenty years, or were sixty years of age, or were incapacitated by illness or injury. Another resolution recommended the assimilation of the Act regarding the Registration of Births and Deaths to that in operation in England, giving equal remuneration to that given in England for similar services. Others pointed out that the salaries paid to the sanitary medical officers of Ireland are totally inadequate; that a fund should be established to provide for the orphans and widows of Poor-law medical officers; that the present system of dispensary medical relief requires to be reformed; that the fees usually paid to medical witnesses for their professional testimony in Crown cases is disproportionate to the services rendered, and to the value of such expert evidence; that the remuneration at present allowed for public vaccination in Ireland is insufficient for the duties involved, and that the rate of compensation should be assimilated to that given in England for similar services; and that the remuneration offered to civil medical practitioners in charge of military troops in Ireland is inadequate.

SUICIDE IN PRISON.

LUNATICS and persons suspected of being insane are obviously out of place in a prison. This self-evident fact has been again illustrated by the case of a man who hung himself in the House of Detention, Clerkenwell, after being confined there with no very obvious purpose except to keep him out of mischief. Sometimes supposed lunatics are sent to prison, sometimes to a workhouse, by magistrates pending an inquiry as to condition of mind. This is a piece of malpractice which ought to be mended. We greatly need wards at asylums in which doubtful cases may be lodged before being certificated. If such wards existed not only would "misadventures" of this painful class be avoided, but, instead of keeping patients out of an asylum as long as possible lest they may prove to be sane, they would be sent there as early as possible in the hope that measures taken immediately may prevent the need of formal branding with the stigma of lunacy, and avert the condition so much dreaded, but which by mistaken treatment is not unfrequently induced.

THE APPOINTMENT OF CORONERS.

THE Middlesex magistrates have sent a deputation to the Home Secretary to beg the Government to undertake the appointment of coroners, and to pay them by salary. Mr. Cross has replied to the effect that the subject is under consideration, and will not be lost sight of. The line taken by Captain Morley in his appeal to the Home Secretary was especially clear and satisfactory. It marks an important development of opinion in the Middlesex Board on a point of

vital moment. Captain Morley insisted strongly that an inquest should consist of a medical inquiry, and not be a quasi-criminal proceeding. This is obviously the great practical necessity of the moment. It is the nondescript character of the inquiry which now makes it so difficult to understand or appreciate. If the coroner, being a medical man, as we have repeatedly urged is indispensable to the proper performance of the coroner's functions, sat simply to investigate the "cause of death" the result would be precision in practice and a system of investigation of real value to the public and the cause of health and safety. We venture to hope Captain Morley's views will be remembered by the Home Secretary, and that they may be communicated to the Cabinet when this most urgent question obtains the place it deserves among the topics of Ministerial concern and practical interest.

THE ELECTION TO THE SENATE OF THE UNIVERSITY OF LONDON.

WE understand that the contest for the vacancy on the Senate of the University of London is likely to be a close one. The advocates for the admission of women to degrees appear determined to carry their point at any cost, and it seems not at all improbable that a large number of votes will be influenced by this side issue, to the exclusion of other considerations. It will be much to be regretted if such a question should be allowed to weigh against the high claims of Sir William Jenner, especially as it will probably be the last opportunity of securing his invaluable services on the Senate. We have nothing to say against the merits of the other candidates, but it must be remembered that they will have other opportunities, and can afford to wait.

MEDICAL OFFICERS AND "NECESSARIES."

A CORRESPONDENT signing "Once a Poor-law Medical Officer," questions a recent remark of ours to the effect that "the present state of the law empowers a relieving officer to withhold nourishment ordered by the medical officer of the union," and suggests a mode of getting over the difficulty. We did not offer any opinion as to the law in the abstract or the written law, but of that concrete which is so curiously compounded of statutes and precedents. It is a fact that relieving officers do refuse or delay to supply necessaries, and they do this with a large measure of impunity, supported by the guardians. We commented only on the facts. If the proceeding recommended by our correspondent really affords a way out of the trouble, for such it is, we are glad to have called it into notice. It can at least be tried, and we wish it all the success it deserves. We had not so much faith in the impressibility of relieving officers as to suppose they could be frightened into discharging their duty. If the feat is practicable, we shall rejoice to see it accomplished.

THE HOSPITAL SUNDAY FUND.

IT will be well if the London churches resolve on Sunday next to double the sum raised by them on previous Hospital Sundays. These sums have been large in themselves, but in relation to the hospitals, to the needs of them, and to the suffering which they represent, they have been very small. They have also been small in relation to the wealth and the Christian principle which they represent. A little consideration of the case of the patients, whether gravely ill or convalescent, will make it easy for healthy Christians to make the collection of 1876 worthy of themselves and of the cause which we strongly commend to them. It will be matter of regret if any church, however poor, should be willing to be unrepresented in this great cause.

SIR WILLIAM FERGUSSON.

SIR WILLIAM FERGUSSON'S symptoms have varied but little during the past week. His nights have generally been good, he takes a fair amount of nourishment, and has no acute suffering; but we regret to learn that he is seldom able to leave his bed, on account of weakness and dropsical swelling of the legs.

ACCIDENT TO DR. ARTHUR FARRE.

WE deeply regret to learn that Dr. Arthur Farre, the well-known accoucheur, met with a deplorable accident on Wednesday evening last, about six o'clock. It appears that Dr. Farre, imagining that he heard some noise at the top of the house, went to the second-floor window to ascertain the cause. While looking out of the window, he lost his balance, fell to the ground, and sustained several severe injuries, among which was a compound dislocation of the ankle-joint.

AMONG the occurrences connected with the medical history of the present time, there would seem to have been an unusual number of cases of cerebro-spinal meningitis and small-pox which may hereafter prove to be facts of some significance. Our columns have contained the reports of several cases of the former disease, and we understand that the attention of practitioners has been excited by the occurrence of other cases of a similar character. Epidemics of this disease—which is of a very painful and fatal nature—have from time to time made their appearance on the Continent and in America. It will be remembered that some few years ago there were several cases of this cerebro-spinal disease in connexion with other cases of an allied, if not identical, malady, to which Dr. Stokes gave the name of "purpuric fever," in Dublin and elsewhere. Small-pox, again, was raging at Bombay at the time the Prince of Wales embarked on board the *Serapis* for the homeward voyage, it is prevailing in Rome, and we think we perceive signs of its increasing in this country.

THE hygienic condition of Consett Infirmary, in the county of Durham, would appear to be one demanding immediate attention. An inquest was held last week on the body of a man who died in the institution from tetanus, following severe scalds. Dr. Renton, according to the report from which we quote, "said that the deceased had suffered from blood-poisoning, induced by the unhealthy state of the infirmary, and that that was the second case of lock-jaw and blood-poisoning they had had this year. If the man had not been taken to the infirmary he probably would not have died." He added that he had been obliged to close the building for three months on account of the blood-poisoning produced by overcrowding. It seems that the Consett Iron Company has promised to provide a new infirmary for the place; and in view of the above facts it is manifestly desirable that the promise should be as speedily as possible redeemed.

WE called attention in our issue of last week to the prevalence of measles in the Kensington district. We have since been favoured with the following particulars of the outbreak. In the past eight weeks about 45 deaths occurred in the sub-district (population 110,000), the deaths being spread over 32 streets. The cause of death registered in 9 cases was "measles," in 31 cases measles with pulmonary complications, in 5 cases measles with other complications. The deaths from measles in Kensington have for some time formed a considerable proportion of the whole mortality returned under this head in the metropolis.

WE would call the attention of the charitable to the claims of the Ventnor Hospital for Consumption, the biennial festival of which has just been held at Willis's Rooms. It is an institution devoted entirely to the reception and relief of consumptive patients, of whom, by the rigorous character of our climate, there must be a very large number of fatal cases annually. During the past year 222 males and 145 females had been received into the hospital as in-patients, while 48 attended as out-patients, giving a total of 415, as compared with 338 in the previous year. Of the 367 in-patients 70 were discharged in better health, 72 were much improved in health, 103 were very greatly improved in health, and 28 cured, or nearly so. It is now desired to erect additional houses to receive convalescents, that the work of recovery carried on in the hospital might be perfected. At the festival to which we have referred—at which Lord Selborne, who was in the chair, made an excellent speech—a sum of £2450 was collected.

FOR the promotion of the health and social improvement of large communities, there are few means to compare with the provision of parks and recreation grounds, where young and old can alike enjoy pure air and take exercise in an open space well planted with trees, shrubs, and flowers. Birmingham has for the second time received from a benevolent lady, Miss Ryland, a considerable estate—this time it is about forty acres in extent—for the purpose of forming a park in one of the most populous wards of the town, which has hitherto had no such advantage. The intrinsic value of the land is probably thirty thousand pounds, but its real and indirect value, as affording a *lung* to a densely-built quarter of a large manufacturing town, is inestimable. The noble example set by this generous lady has been speedily followed by the Corporation, who have purchased an additional site for a park at the other end of the town.

IT is gratifying to learn that the Queen's University Graduates' Association, which was established last year, under the presidency of Mr. MacCormac, of St. Thomas's Hospital, promises to become an active and useful body. The Association had their annual dinner on the 31st ult., at the St. James's Restaurant, Piccadilly, after which the prospects and work of the Society were discussed, and the officers elected for the ensuing year. Among the members are a great number of medical men in practice in or near London, besides barristers, clergymen, members of the civil service, men of letters, and others.

MR. E. CHESSHIRE, of Birmingham, who was accompanied by the Right Hon. Sir C. B. Adderley, President of the Board of Trade, had an interview with the President of the Local Government Board on Monday on the disposal and utilisation of town sewage "by interception of the *solid* portion of the excreta of the population at the fountain head *before* it had entered the sewers, by filtration and subsidence at the sewers' outlets," and by irrigation of land with the clarified liquid sewage only.

WE are glad to see the jury in the Bravo case have learnt from our remarks on the subject, and citation of the Act of Parliament, that a statutory power rests with the majority of every jury charged to inquire *super visum corporis*, to call additional medical evidence, or require a post-mortem examination, if they are dissatisfied.

WE would direct the attention of our readers to the fact that the final meeting of the committee of the Rumsey Testimonial Fund will be held at the General Register Office, Somerset House, on Monday next, at four o'clock.

THAT the city of Bombay sadly lacks a General Hospital for Europeans is a fact which H.R.H. the Prince of Wales had an opportunity of noting while there; but as yet the Government holds out no hope of raising one. An attempt is being made, we hear, to place it in the New Sailors' Home, a magnificent building but recently completed; but the trustees of the latter are said, naturally enough, not to second the attempt of Government to get out of their difficulty. Meanwhile, the unfortunate sick Europeans have to linger on in a place long since condemned as unfit for healthy ones to live in.

WE understand that considerable dissatisfaction is felt by many members of the profession at the encouragement given to homœopathy and to homœopathic practitioners by a well-known English journal of therapeutics. Some complaints, to which we may at an early date refer at greater length, have reached us.

SURGEON-MAJOR J. D. MACKENZIE, Senior Surgeon of the Hospital, and Professor of Surgery, Grant Medical College, after a distinguished career, has taken two years' furlough, with, it is believed, the ultimate intention of retiring. He is succeeded by Surgeon-major H. J. Blanc.

ON Monday, May 29th, the Duke of Devonshire, as Chancellor of the University of Cambridge, presented in the House of Lords a petition signed by the professors and teachers in the Medical School of the University against Lord Carnarvon's Bill relating to cruelty to animals.

MEDICAL DEPUTATION TO THE PRESIDENT OF THE LOCAL GOVERNMENT BOARD.

AN influential representative deputation of medical men, headed by Dr. Lush, M.P., Mr. Walter, M.P., Mr. Lopes, M.P., and Dr. Brady, M.P., recently waited upon the President of the Local Government Board to urge upon the Government the necessity for such an amendment of the Superannuation Act as would give to Poor-law medical officers the right to superannuation after a long term of service, and to press also that in all arrangements between guardians and their medical officers drugs should be a charge upon the rates. With the President were Mr. John Lambert, C.B., Mr. Lumley, Q.C., and Dr. Mouat.

Dr. Lush, M.P., in introducing the deputation, said the gentlemen present represented the Poor-law medical officers in the service under the Board, about 4000 of whom were in association, and it was the Council of this body who had come to lay before the President their views on the practice in the administration of the Poor Law. They desired to see the "dispensary system" more fully adopted, in order that the wants of the poor might be more fully met, and it was desired to urge that superannuation should be granted to those who had earned it by years of faithful service.

Dr. Rogers, Dr. J. Wickham Barnes, and others, having spoken fully as to the objects which the deputation had in view,

The PRESIDENT, in reply, pointed out that civil servants gave exclusive services, and were in Government employ, while the Poor-law medical officers gave, in the majority of instances, only partial services, and were in the employ of the ratepayers, and therefore could not come under the head of civil servants. He pointed out that a medical officer might serve many years under the Poor Law and yet serve only particular localities a few years; but he admitted that he should be inclined to encourage the payment of a liberal compensation in cases where there was a long and continuous service, of which he thought there were but few instances. Where they did occur he was entirely with the deputation. On the question of dispensaries in populous places he said there was no prejudice against this in the Department, and there was no reason why the practice

should not be adopted, as Dr. Rogers had fairly and considerately urged, in populous places. There was at the present time a strong feeling on the subject of out-relief, and an opinion that medical relief was too freely given; but an extension of the dispensary system was a different question, and he thanked them for the information they had placed before him.

The deputation thanked the Minister and retired.

Correspondence.

"Audi alteram partem."

DENTAL ANÆSTHETICS AND HEART DISEASE.

To the Editor of THE LANCET.

SIR,—Mr. Clover raises some objections to my explanation of the action of nitrous-oxide gas, and he suggests a different interpretation of the phenomena. We agree as to the fact that the pulse, which for a time is rendered full and throbbing by the inhalation of the gas, subsequently, in some cases—and in every case where the inhalation is pushed to extremes—vanishes entirely. I need not here repeat the explanation of these facts which I suggested in THE LANCET of May 20th.

That Mr. Clover should have given the gas to more than eleven thousand persons without a fatal result is evidence of the care and skill with which he administers that agent, but his great experience is not in itself sufficient to establish the truth of his theory. He states that he has met with no case "showing signs or symptoms of the heart being dilated by the process." I would remind Mr. Clover that *distension* of the heart's cavities does not necessarily imply *dilatation* discoverable by physical signs; but the question arises, What are the signs and symptoms of dilatation of the heart in such cases? It is not unlikely that in persons with normal (not emphysematous) lungs, and with thin chest walls, careful percussion and palpation might discover some dilatation of the right cavities; but this would be less decided than might *à priori* be expected, because at the time when the right cavities are most distended the left are comparatively empty and flaccid. I have never percussed the cardiac area of a patient narcotised by nitrous oxide; has Mr. Clover done so with a negative result as regards evidence of dilatation? If not, he has no right to assume that no signs of cardiac dilatation exist. Then, as to "symptoms" of dilatation, I confidently assert, from what I have seen of experiments upon animals, that when, during the stage of pulmonary obstruction, the systemic veins and capillaries are sufficiently distended with venous blood to cause lividity of the surface, the right cavities of the heart, and especially the auricle, are not only distended, but actually dilated, in consequence of the obstruction in front.

I am at a loss to understand the physiological meaning of Mr. Clover's assertion that, admitting the existence of obstruction in the lungs, "there would be no risk of distension of the right heart, for by this time its contractile power has almost gone." Surely the diminution of contractile power is one of the elements contributing to dilatation of a muscular cavity. Everyone who administers nitrous oxide should bear in mind the fact that during the stage of lividity the right cavities of the heart are distended, and probably dilated, and when, as often happens at the same time, the muscles of the trunk and limbs are convulsively contracted, the pressure of the contracting muscles upon the systemic veins drives the blood forcibly towards the right cavities of the heart, and thus increases the distension. Mr. Clover asks why, if the increased fulness of the pulse is the result of contraction of the systemic arterioles, the skin is not rendered visibly pallid? I reply, because the resistance offered by the contracting arterioles immediately excites more forcible contraction of the left ventricle, so that the amount of blood in the capillaries is not obviously lessened.

Mr. Clover's statement that the cessation of the pulse in the advanced stage of nitrous oxide anæsthesia is explained by the failure of the heart's action consequent on want of oxygen in the blood is a revival of Bichat's long since refuted and exploded doctrine, and it is inconsistent with unquestionable facts, in particular with the condition of the heart's cavities as seen in animals killed by the gas, and the evidence of systemic venous distension afforded by the lividity so commonly observed in the human subject. Moreover, if the cessation of the heart's action were caused by the presence of black blood in its tissues, the circulation could not be so rapidly—so almost instantaneously—restored as it is by the readmission of atmospheric air to the lungs.

The phenomena of nitrous oxide anæsthesia are essentially the same as those which result from apnœa, or, as it is commonly called asphyxia, caused by the exclusion of atmospheric air. Dr. John Reid, in his famous paper "On the order of succession in which the vital actions are arrested in asphyxia," a paper with which everyone who discusses this question ought to be thoroughly familiar, was the first to demonstrate that, while the primary effect of the entrance of unaerated blood into the systemic arteries is to cause an impeded passage of blood through the minute systemic vessels, and a consequent increase of arterial tension, as shown by the dynamometer, the ultimate result is to call forth so great an obstruction to the passage of blood through the lungs, that while the left side of the heart and the systemic arteries are comparatively empty, the right cavities and the systemic veins are filled to repletion.

Dr. Reid's observations and conclusions have been completely confirmed by more recent experimenters, who have called to their aid that most invaluable agent, curare, by means of which the disturbing influence of the animal's struggles upon the blood pressure is obviated. I am indebted to my friend and former colleague, Professor Rutherford, for the opportunity of witnessing the phenomena of apnœa (asphyxia) in a curarised dog whose pericardium had been opened so as to expose to view the surface of the various cavities of the heart. The suspension of the respiratory movements, and the consequent passage of black blood into the systemic arteries, are immediately attended with an increase of arterial tension, as indicated by the kymograph connected with the tube of a dynamometer introduced into the carotid. For a period of about two minutes the arterial pressure steadily rises, and with this there is seen to occur an increasing distension of the *left* cavities of the heart, the left auricle swelling up and assuming a smooth, globular form like a distended india-rubber ball. Then the phenomena rather rapidly change: the *right* cavities of the heart become distended and dilated, while the left gradually diminish in size, until, at the moment of the animal's death, the collapsed left cavities are almost concealed by the greatly distended and dilated right cavities. Meanwhile, the pressure in the systemic arteries, as indicated by the dynamometer in the carotid, has rapidly fallen in consequence of the defective blood supply to the left side of the heart resulting from the obstruction in the lungs. In this experiment we have demonstrative evidence of the influence of an impediment which can only result from contraction of the muscular arterioles, in causing not only an increase of arterial pressure, but also distension, and even dilatation, first of the left cavities, and secondly of the right cavities of the heart in the different stages of asphyxia. The phenomena of nitrous oxide anæsthesia are precisely similar, but they occur with greater rapidity, because by the inhalation of that gas the blood is more rapidly deprived of its oxygen than it is by the mere exclusion of atmospheric air from the lungs.

The physiological interest and the practical importance of the subject must be my apology for the length of this communication.

I am, Sir, your obedient servant,

Savile-row, June 12, 1876. GEORGE JOHNSON.

THE PROFESSION OF DENTAL SURGERY.

To the Editor of THE LANCET.

SIR,—The attempt to bring the influence of the medical profession to bear upon the training of dental surgeons can be of advantage only when medical men are made fully acquainted with the scope and requirements of dental surgery, an accurate knowledge of which they do not at present possess. The existence of special journals, while

they render great service in bringing before the dental practitioner all that relates to his calling, tends to remove from the eye of the general practitioner much that he well might know, and more that it is needful that he should know if he would form a just opinion of the present state of dental surgery. The absolute necessity for a long special training in order to acquire moderate capabilities as a dental practitioner is very generally overlooked, and the power to pass an examination in surgery and to write a prescription is accepted as a sufficient education for the dental surgeon. But those whose powers constitute them efficient judges know full well that there is little difficulty in recognising what is required in the treatment of a case, but very great difficulty in acquiring the power to carry it into effect. To take out a large portion of the softened tissue from a carious tooth and to fill up the hole with a plastic material requires little skill; but to remove the diseased part as fully as may be, to leave the cavity in a form capable of retaining a long-lasting plug, and to introduce that plug—in fact, to perform the operation up to the highest standard of excellence, without an undue expenditure of time exhaustive to the patient and operator—requires great skill, a degree of skill gained only by patient training over at least two years in pupils naturally not inapt. Let any one interested visit the Dental Hospital, and watch the performances of students of one year, then those of two years' training, and, if possible, the operations of the more skilful teachers, let him then try his own hand, and all I have stated will be admitted. That which is true respecting filling teeth applies also to other dental operations. But the dental surgeon will be occupied three-fourths of his time in treating carious teeth, and, if his operations are rightly performed, he will have rendered good service, and secured the lasting gratitude of his patients.

Were it otherwise we should find medical practitioners using the leisure hours of their early professional life in the performance of dental operations. In truth the education of the surgeon does not embrace dental surgery. A man may be a member of the College of Surgeons or Physicians or of the Apothecaries' Company, and yet know nothing of dental surgery; and it would be unreasonable, and, consequently, all but impossible, to impose upon him a long and expensive training in a specialty he is not specially destined to practise; and, again, the knowledge acquired would be speedily lost unless constantly practised. That which would be true of the general surgeon applies with equal force to the dental surgeon; whose knowledge of general surgery fades from disuse by the time he acquired his general diploma; for his specialty will, if rightly practised, demand all his time and thoughts. He cannot remain an effective general surgeon if he would be a faithful dental surgeon. He may be a legally qualified practitioner, but, without use, the knowledge he acquired up to the level of a pass examination will speedily waste, and he will become morally disqualified.

These facts were fully recognised twenty years ago, when the College of Surgeons instituted its department of dental surgery, laid down a curriculum to be followed by students, and after examination granted a diploma of fitness to practise, under the title of Licentiate in Dental Surgery. In this curriculum certain subjects embraced in the general medical education, but scarcely needful to the dentist, such as midwifery, forensic medicine and botany, &c., were left out, and in their stead special dental subjects were introduced, leaving the time and cost of the profession strictly unaltered. The wisdom of this course is shown in the fact that the Dental School formed to meet the requirements of the curriculum has from year to year increased the number of its students, who at the present time nearly approach one hundred; and that the education meets the necessities of the dental surgeon is proved by its voluntary acceptance by those whose purpose it is to follow dental practice. For it must not be forgotten that the legal powers given to the colleges in the dental charter are permissive only; hence the education is offered, not enforced. The value of the diploma has been steadily advanced by extending the educational opportunities, by gradually increasing the strictness of the examination, and by the addition of written to the *viva voce* questions. And the preliminary examination in arts now required of the medical student before entering upon professional studies will also be required of the dental student from October, 1877.

The licentiateship is the qualification needed by the dental surgeon, for no other indicates that the possessor is practically acquainted with dental surgery; and surely, if we would gain our living by dental practice, we must before all else be skilful dentists. I use the word *dentist* because the public will call us dentists do what we will, just as they call the ophthalmic surgeon an oculist; and if we suffer, it will not be by the name but by our want of worth.

I do not for one moment argue against the dental student taking a general medical qualification; on the contrary, I would urge the student whose means and time will allow, to take the membership or fellowship of the College of Surgeons or Physicians, and I would further advise him to take the B.A. of one or other of our Universities. But I do protest against the student making a general qualification stand in the stead, and take the place, of the special one if he proposes to gain his living by our specialty.

Dental surgery some years back suffered greatly from one or other of two conditions. The practitioner had at the outset only a general medical education, or, in many cases, he possessed no education at all, and the suffering is not yet at an end; but the wise course taken by the College of Surgeons has already very greatly reduced the evil, and will doubtless ere long, to the exclusion of the incompetent, provide the public with a very efficient race of practitioners.

It is reasonably hoped that the permissive education, the success of which no well-informed person can deny, will become compulsory, and that a distinctive line will be drawn between the competent and incompetent practitioner, recognisable by the public.

The membership and licentiateship jointly may be said to meet the case, but they involve a higher and more costly education than either taken singly, and it is not reasonable to expect that all dental students will be prepared to meet the demands of the double qualification. For such, and they will probably form the majority, at least for some time to come, the licentiateship will suffice, as being the educational equivalent of the single qualification in the general practitioner.

There has been much loose talk about the status of the dental practitioner. We had better work more and talk less upon the education of ourselves and our fellows. The Legislature can neither give nor withhold social status. The public will settle the question, and our position will be determined by our individual and collective professional and general culture, by our professional usefulness and scholarly attainments.

I remain, Sir, yours truly,

June 14th, 1876. JOHN TOMES.

ST. THOMAS'S HOSPITAL REPORTS.

To the Editor of THE LANCET.

SIR,—I have just read your review of the sixth volume of the St. Thomas's Hospital Reports, and there is but little doubt the subscribers will concur in your criticisms. It is simply discreditable that one of the largest of our metropolitan hospitals should put forth such a mediocre and meagre production. With the exception of Dr. Peacock's paper, the remainder of the articles are not more than up to the requirements of any of the weekly periodicals. Nearly one-third of its bulk consists of make-shift matter in the way of dull and wearying statistics, commonplace case-book reports, and advertisements of the staff and school. I have taken from my book-shelves the first volume of this New Series, and 188, out of its 706 pages, possess the same amount of interest and originality. Do the editors suppose that their readers even attempt to wade through these prolix transcripts from the ordinary records of their clinical clerks? It may be for their edification to tell them that their subscribers, and the profession generally, look for something better; and that they expect, from such a vast field for observation and research, more originality, greater condensation, and articles of a very different degree of merit from those which have lately appeared. If such cannot be achieved, it would be in every way more politic to commence the "Completion of St. Thomas's Hospital Reports."—I am, Sir, your obedient servant,

A COUNTRY SUBSCRIBER TO THE REPORTS.

May 27th, 1876.

WESTMINSTER HOSPITAL.

To the Editor of THE LANCET.

SIR,—We should feel greatly obliged by your publishing the annexed resolution, passed at a general meeting of our students:—

"That gentlemen from other hospitals be earnestly requested to refrain from competing for the vacant post of house-surgeon, this appointment having always been regarded as a close one. The students consider that great injustice is being done to one of their number by its being advertised for general competition."

We remain, dear Sir, yours faithfully,

B. KENDAY ARCHER,
T. H. MAY,
On behalf of the general body of Students.

June 14th, 1876.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor Turner, M.B., F.R.S.E., of the University of Edinburgh, will resume his course of lectures on the Comparative Anatomy of the Placenta, on Monday next, June the 19th, at 4 o'clock P.M. These lectures will conclude the entire course for the present year.

DR. PHILIPSON, M.A., F.R.C.P., of Newcastle-upon-Tyne, has been appointed Professor of Medicine in the University of Durham.

MR. JAMES FISHER, M.R.C.S., L.S.A., has been appointed to the Commission of the Peace for the borough of Dudley.

FROM a recently published correspondence which has passed between the town clerk of Gateshead and the Local Government Board, respecting the provision of a hospital in that urban sanitary district for non-pauper cases of infectious diseases, it appears that the Gateshead Town Council intends to provide a hospital for the purpose without further loss of time. It is stated that a plot of land, containing over three acres, has been purchased on very favourable terms, and that the plans of the intended buildings are in a forward state.

MEDICAL DEFENCE ASSOCIATION IN THE NORTH.—A meeting of local medical practitioners was recently held at Newcastle-upon-Tyne, when it was resolved to form a branch of the Defence Association for that town and neighbourhood, to be called the "North of England Branch." The leading medical men in the town have joined the movement, and the following gentlemen have been elected officers of the branch, viz.—President: Dr. Dennis Embleton. Vice-Presidents: Dr. G. H. Philipson, Dr. Byrom Bramwell, Dr. G. Y. Heath, Mr. J. Russell, Dr. W. C. Arnison, and Dr. Luke Armstrong. Committee: Mr. J. Hawthorn, Mr. S. McBean, Mr. A. Maclachlan, Mr. A. Bell, Dr. G. H. Hume, Dr. F. Newcombe, Dr. B. Barkus, Mr. W. A. I'Anson, Dr. R. H. Wilson, Dr. Banning, and Dr. G. Douglas. Mr. R. Clark Newton has kindly consented to discharge the duties of honorary secretary and treasurer.

NEW INFIRMARY BUILDINGS.—The "Local Government Chronicle" states that the guardians of St. Olave's Union have erected a large block of buildings, forming part of the new infirmary, which, when completed, will provide for the reception of all the sick inmates of their present workhouses. The portion now built will accommodate 172 persons; but eventually there will be accommodation for 400. The buildings are situated at the rear of Rotherhithe Workhouse, Deptford Lower-road. Each of the large wards contains accommodation for 32 beds. They are 96 ft. long, 24 ft. wide, and 13 ft. high; thus giving 72 ft. superficial and 936 cubic feet of space to each patient. The ventilation of the wards at times when the windows cannot be opened is provided for by flues passing up the walls and carrying fresh air into boxes placed under the head of each bed. These boxes have perforated zinc fronts, through which the fresh air passes into the room. There is over each bed an upcast shaft for conveying away the fouled air from the ward.

Medical Appointments.

ANDERSON, W., M.B., C.M., has been appointed a Medical Officer and Public Vaccinator for the Parish of Whithorn, Wigtownshire.

ASHBY, A., M.B., F.R.C.S., Medical Officer of Health for the Combined Urban Sanitary Districts of Grantham, Newark, Sleaford, Little Gonerly, Ruskington, and Spittlegate, and Rural Sanitary Districts of Grantham, Newark, and Sleaford, has been re-elected for three years from July 23rd.

ATKIN, N. E., L.R.C.S.I., L.K.Q.C.P.I., and L.M., has been appointed Medical Officer for the Hill District, and Public Vaccinator for the Brynmawr District of the Crickhowell Union, vice Peirce, resigned.

BAYES, F. W. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Snoring District and the Workhouse of the Walsingham Union, Norfolk, vice Hudson, deceased.

BOWES, J. I., M.R.C.S.E. & L.S.A., has been appointed Assistant Medical Officer to the Northampton County Asylum.

BRABAZON, A. B., M.D., L.R.C.S.I., L.S.A.L., has been appointed Medical Officer of Health for the Bath Urban Sanitary District, vice Barter, deceased.

BROWN, J. J. G., M.B., C.M., has been appointed a House-Physician to the Royal Infirmary, Edinburgh.

BUTLER, E. F., L.K.Q.C.P.I., L.R.C.S.I., L.A.H.D., has been appointed Medical Officer and Public Vaccinator for the Whitworth District of the Auckland Union, vice Heffernan, resigned.

CHAPMAN, J., L.F.P.S.G., L.M., & L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Ludham District of the Smallburgh Union, Norfolk, vice Buchan, resigned.

COLEMAN, M. O., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Surbiton District of the Kingston Union, Surrey, vice M. T. Coleman, M.R.C.S.E., L.S.A.L., deceased.

COX, W. A., M.B., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the No. 5 District of the Leicester Union, vice Fullagar, deceased.

KEITH, A. E., M.B., C.M., has been appointed Medical Officer of Health for the Guisbrough Rural, and the Guisbrough, Skelton, and Loftus-in-Cleveland Urban, Sanitary Districts.

KEMPE, J. A., M.R.C.S.E., L.R.C.P.L., has been appointed House-Surgeon at University College Hospital, vice Jameson, whose time has expired.

LAW, W. T., M.D., F.R.C.S.E. &c., has been appointed Resident Medical Officer to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Rendle, resigned.

LAWRENCE, W. S., M.R.C.S., L.R.C.P. & L.M., has been reappointed Medical Officer of Health for the Preston Rural Sanitary Authority, at a salary of £100 per annum.

LOGIE, J. S. S., M.D., L.R.C.S.Ed., has been appointed Interim Medical Officer and Public Vaccinator for the Parish of Evie, Orkney, vice Reid, whose appointment has expired.

LOTHIAN, J. A., M.D., F.F.P.S.G., L.R.C.S.Ed., has been appointed a Dispensary Surgeon to the Royal Infirmary, Glasgow, vice McEwen, appointed to the wards.

MCILWRAITH, T., L.F.P.S.G., has been appointed Medical Officer for the Upper District of the Parish of Colmonell, Ayrshire.

MALINS, E., M.D., C.M., has been appointed Surgeon to the Birmingham and Midland Hospital for Women, vice Bracey, resigned.

O'MEARA, M. A., L.R.C.S.I., L.K.Q.C.P.I., and L.M., has been appointed Medical Attendant to the Royal Irish Constabulary, Piltown, co. Kilkenny, vice Bowers, deceased.

PURCELL, F. A., M.D., has been appointed Assistant-Surgeon to the Cancer Hospital, Brompton.

SETTLE, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Parish of Barrow-in-Furness and the new Workhouse.

SMITH, G. J. M., M.B., C.M., M.R.C.S.E., has been re-appointed Demonstrator of Anatomy at the Westminster Hospital Medical School.

SNOW, H. L., M.D., M.R.C.S.E., has been appointed a Surgeon to the Cancer Hospital, vice Irvine, resigned.

WHITE, D., M.D., L.R.C.S.Ed., has been appointed a Medical Officer and Public Vaccinator for the Parish of Whithorn, Wigtownshire.

WILLIAMS, Dr., has been elected Hon. Surgeon to the Liverpool North Dispensary.

WILLIAMS, H., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the South District of the Bingham Union, vice Taylor, resigned.

WILSON, H., L.K.Q.C.P.I. & L.M., F.R.C.S.I., has been appointed Oculist to the National Institution and Molyneux Asylum for the Blind of Ireland, Dublin, vice Wilde, deceased.

WRIGHT, T. P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the East District of the Bingham Union, vice Bateman, deceased.

Births, Marriages, and Deaths.

BIRTHS.

ARTHUR.—On the 11th inst., at Airdrie, the wife of Hugh Arthur, M.D., of a daughter.

KNIGHT.—On the 7th inst., at Rotherham, the wife of Henry John Knight, M.R.C.S.E., of a son.

MAY.—On the 3rd inst., at Rogerstown, co. Kilkenny, the wife of Walter May, L.K.Q.C.P.I., of a son.

THOMAS.—On the 11th inst., the wife of Moses Thomas, M.D., Superintendent of the Royal Infirmary, Glasgow, of a son.

MARRIAGES.

POWER—GODWIN.—On the 8th inst., at St. Mary's, The Boltons, S.W., by the Rev. R. H. Godwin, brother to the bride, William Henry Power, Local Government Board, Whitehall, eldest son of W. H. Power, M.D., Ladywell, Kent, to Charlotte Jane, youngest daughter of the late B. C. Godwin, formerly of Winchester.

WHITE—MASON.—On the 8th inst., at All Saints' Church, Kingston-on-Thames, by the Rev. Chart Mason, uncle of the bride, George Farr White, F.R.C.S., late 77th Regiment, to Alice, second daughter of Samuel Mason, Esq., J.P., of The Storks, Norbiton.

DEATHS.

ADAMS.—On the 4th inst., at Calstock, Devon, Robert Adams, Surgeon, aged 28.

BALSHAW.—On the 24th ult., at Altrincham, Edward Pass Balshaw, M.R.C.S.E., of Manchester, aged 33.

BIRD.—On the 31st ult., at Bunbury, Cheshire, Benjamin Bird, Surgeon, aged 70.

BOLTON.—On the 27th ult., at the Metropolitan Asylum District Asylum, Caterham, Edwin Henry Bolton, M.R.C.S.E., aged 47.

BOYLE.—On the 23rd ult., at Hutton-Rudby, Yorkshire, Andrew Allison Boyle, L.R.C.P.Ed., aged 31.

BROWN.—On the 12th inst., at Lewisham, Samuel Stainton Brown, M.R.C.S.E.

CALDERWOOD.—On the 27th ult., at Buccleuch-street, Glasgow, David Calderwood, L.R.C.S.Ed., aged 50.

DAVEY.—On the 26th ult., at Walmer, Richard Gibbons Davey, M.R.C.S.E., aged 66.

DAVIES.—On the 3rd inst., at Warrington, John Davies, M.D., aged 71.

EATON.—On the 30th ult., at St. Martin's, Stamford, William Eaton, L.R.C.P.Ed., aged 74.

EVANS.—On the 24th ult., at Crockherbtown, Cardiff, Edward Hier Evans, M.R.C.S.E., aged 46.

FERGUSON.—On the 19th April, on board the *Himalaya*, William Ferguson, L.R.C.S.Ed., Surgeon-Major, Army.

GREY.—On the 30th April, at Kruid Fontein, South Africa, George Grey, M.D., late of Newcastle-on-Tyne, aged 45.

HYND.—On the 22nd ult., at Inveresk, Lawrence Ramsay Hynd, M.D., late of Birkenhead.

KERR.—On the 24th ult., at Moffat, Daniel Kerr, L.R.C.S.Ed., aged 69.

LIDDON.—On the 30th ult., at Taunton, Henry Liddon, M.R.C.S.E., aged 77.

LLOYD.—On the 8th ult., at Halifax, Nova Scotia, Sandford McVittie Lloyd, M.D., Deputy Surgeon-General, Army.

MADDOCK.—On the 31st ult., at Buncrana, co. Donegal, William Maddock, M.B., aged 26.

MYRTLE.—On the 6th inst., at Rutland-street, Edinburgh, John Young Myrtle, M.D., aged 64.

ORWIN.—On the 31st ult., at Brixton, James Orwin, M.D., aged 65.

PECK.—On the 8th inst., at Richmond-road, Barnsbury, William Ralph Peck, M.R.C.S.E., aged 61.

PERKINS.—On the 9th inst., at Rye Bank, Wem, Richard Steele Perkins, M.R.C.S.E., aged 65.

PHILLIPS.—On the 27th ult., at Treorki, Glamorganshire, Thomas Richards Phillips, M.R.C.S.E., aged 34.

SHARPE.—On the 29th ult., at Waltham-cross, John Sharpe, M.R.C.S.E., aged 70.

SMITH.—On the 2nd inst., at Tonge, Bolton, Lancashire, William Smith, Surgeon, aged 33.

STEAD.—On the 9th inst., at Southport, Joseph Stead, M.R.C.S.E., late of Chestham.

VICARY.—On the 8th April, at Bath, Charles Vicary, M.R.C.S.E., aged 54.

WALKER.—On the 20th ult., at St. Leonards, Stephen Walker, M.D., aged 43.

WARD.—On the 20th ult., at Richmond, Surrey, William Ward, Surgeon, aged 69.

WILLIAMS.—On the 18th ult., at Pronhaul, Festiniog, William Williams, M.R.C.S.E., aged 43.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. McLeod: Medico-Legal Experiences.
Edmund Neison: The Moon.
Guy's Hospital Reports.
Philosophy and its Foundations.
Dr. Garrod on Gout.
Dr. Maudsley: Physiology of the Mind.
Messrs. Smith and Walsham: Operative Surgery on the Dead Body.
Mr. Beesly: Germanicus.
Mr. T. Greene: Old Words and Modern Meanings.

Notes, Short Comments, and Answers to Correspondents.

THE TREATMENT OF POLYURIA.

M. HAYEM mentioned at a meeting of the Paris Biological Society, March 18th, 1876, the case of a man aged forty-eight, who had enjoyed good health up to 1867, when he suffered from a nervous attack, loss of consciousness, and paralysis of the right arm. In 1874 the sight became impaired. The patient remained in good health up to February, 1875, when he became affected with polyuria, polyphagia, and polydipsia, soon connected with nocturnal incontinence of urine. He was ordered issues to the lumbar region, and iodide of starch. When the patient was first seen by M. Hayem, the face was puffed and the lower limbs œdematous. The urine did not contain any albumen, but a certain amount of sugar. He voided in the twenty-four hours four quarts and a half of urine, half an ounce of urea per quart—viz., about two ounces altogether. After a treatment of twenty-eight days, the patient taking about one grain of opium per diem, the quantity of urine diminished to about three pints per day, and the urea to less than half an ounce per quart—viz., seven drachms in the twenty-four hours. The general health was much improved. It is supposed that the opium acted as an alterative of the nervous system. In similar cases Trousseau and Bouchard succeeded with valerian.

M. B. L.—If he was called as a professional witness, he is entitled to a fee.

COMPULSORY VACCINATION IN BOMBAY.

THE epidemic of small-pox which swept over the city of Bombay during the first quarter of the present year, and to which reference has already been made in our columns, will not have come in vain if it induce a belief in the protective power of vaccination amongst the native inhabitants. We learn that the Governor in Council has directed Dr. Pinkerton, Superintendent-General of Vaccination for the Presidency, to draw up a draft Bill for the purpose of making vaccination compulsory within the town and island of Bombay. This is not the first time such a measure has been contemplated. So long ago as 1869 an attempt was made to introduce a compulsory Bill, but without success. Since then, however, small-pox has been so busy in both European and native communities, that the former have now arrived at a determination not to rest satisfied until the public health is protected by a Compulsory Vaccination Act. The outbreak of small-pox this year was remarkably fatal in Bombay, nearly 3000 deaths having been caused by it; 46·3 per cent. of those attacked being carried off. Experience would seem to show that these epidemics in India come on with the cold season, lose much of their intensity in the hot weather, and gradually disappear during the rainy season. It is to be hoped that the local Government will lose no time in adopting and putting into force Dr. Pinkerton's Bill, which appears to be drawn up with much care and forethought. In view of avoiding any hurt to native prejudice or susceptibility, the sense of the leaders of public feeling amongst the community has been taken with reference to the introduction of compulsory vaccination, and the result was that of twenty-seven gentlemen representing the Hindus, Musulmans, Jews, Parsees, and Portuguese, only three offered any opposition to the measure. This expression of native opinion must, we should think, strengthen the hands of the promoters of the Bill. The measure, carefully and ably prepared, as it appears to us, is one to be most heartily commended, and we trust that nothing will occur to mar its progress this time. That such a large and populous city as Bombay should have been left so long a prey to a loathsome and virulent disease is not very creditable to the dominant power.

Dr. Markham Skerritt's paper on Croton-Chloral shall appear in an early number.

MEDICAL DEGREES AT THE UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—While thanking you for the insertion of my letter of the 24th ult., I am the last who would wish to waste your valuable space with a fruitless correspondence; but I feel that the chief point, in fact the original cause, of this discussion has been somewhat overlooked both in your able articles and in the letters of some of your correspondents. It is this: Many men settled in practice, to whom residence would be simply ruin, wish to rectify an error of their student days; they wish to graduate. They find a difficulty in their way at the London University, where medical study before matriculation is not recognised. Turning away in disgust, they suggest that Cambridge should examine practitioners of some years' standing without residence. They thus strain at a gnat and try to swallow a camel. If, however, they asked London to remove the difficulty at present in their way, I think they would succeed, for the University would thus increase the number of its candidates, and would not act contrary to the principles on which it exists; but to ask Cambridge to forego residence altogether is as useless as it is unfair. Your liberal proposal to reduce the time of residence would not help them out of their difficulty; in fact, it would benefit only one class of persons, and they are students who, having spent some time in London, then change their minds, and go to Cambridge. It is as important in medicine as in other professions that a student at the very outset of his career should mark out the course he intends to follow. If an industrious man selects Cambridge, he will find everything in his favour, as I pointed out in my last, not excepting pecuniary considerations; but if a student, having spent some time in London, then changes his mind, Cambridge can hardly be expected to help him out of a difficulty (due to his own vacillation) by adopting a course which, to say the least, would be attended with some risk to her prestige.

Whilst recognising the distinction you draw between second-rate *practitioners* and second-rate *men*, I am at a loss to understand your comparison with theological examinations. The University, while holding pass and honour theological examinations for the B.A. degree, no more grants degrees in divinity on a pass standard than it does degrees in medicine.

I am, Sir, yours &c.,

May 24th, 1875. A CAMBRIDGE GRADUATE (B.A.)

*** We never stated that the University granted *degrees* in divinity on a pass or honour standard.—ED. L.

MEDICAL NIGHT SERVICE IN PARIS.

WE have stated that this service is now successfully working both in Paris and some large cities of France. It has been suggested that midwives should also be included in the arrangement. The reasons given are very good; for some of these women have of late been the victims of most detestable wickedness. One was fetched in the night, and taken to a distant lonely part of Paris, under the pretence that her services were required for a confinement. The poor creature was most shamefully outraged. Another met a worse fate, as she was actually murdered after having been decoyed in the same manner.

MEDICAL SOCIETY OF LONDON.

To the Editor of THE LANCET.

SIR,—Law No. 3 of our Society is as follows:—"Members of the medical profession residing in Great Britain and Ireland shall be eligible as Fellows."

Your obedient servant,

RICHARD DAVY,
Honorary Secretary to the Medical Society of London.

Chandos-street, Cavendish-square, June 13th, 1876.

ROTATORY MOVEMENTS OF THE HEAD AND NECK.

DR. BONNET DE MALHERBE, Physician at the Neris watering-place in France, records in *L'Union Médicale* of April 25th, 1876, the case of a man of thirty-five, who suffered from this complaint. The sharp rotatory movements occurred about fourteen times a minute, but the general health was tolerably good. This patient had had several attacks of rheumatism, and it was thought that the convulsive movements were connected with that complaint; but this supposition was negatived by the complete failure of the thermal treatment of rheumatism. Trousseau (*Clinique*, vol. ii.) mentions one case only of the kind under the head of Chorea. M. Jaccoud, in his "Traité de Pathologie," gives a good description of this disease under the head of Hyperkinesis of the Nervus Accessorius of Willis, which supplies the trapezius and sterno-mastoid. The disease has been observed more frequently in Germany and England, but has proved incurable.

Dr. W. B. Russell, (Glasgow.)—The observations, so far as we are aware, have not been published. The information in question was supplied to us by a resident practitioner who was present at the meeting.

Mr. Mackay.—Thanks.

An Enquirer.—The names, on either side, were not taken down.

THE WILLOW AS A REMEDY FOR ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—The following most interesting letter I have just received from South Africa:—

"Port Elizabeth, South Africa, April 14th, 1876.

"DEAR SIR,—I have seen with much interest your papers in THE LANCET on the Treatment of Rheumatism by Salicin, and thought that the following story might be welcome.

"In 1861, I was district medical officer in Hope Town, on the banks of the Orange River, not far from the now celebrated diamond-fields. The town is situated in one of the high plateaus of South Africa, and the country is occupied by a race of nomadic Dutch Boers, who live in waggons or tents, travelling about from place to place, as the rains, or rather occasional thunder-storms, filled the natural hollows. When these are dried up, the farmers are obliged to fix their abodes on the banks of the river.

"The temperature in summer is very high, and the dryness of the atmosphere so great that surgical instruments or fire-arms never rust. The winter, with its clear bright sun and cool temperature, is most exhilarating. You can imagine that a doctor's life in such a region must indeed be a sinecure. On one occasion, however, I was sent for to visit the wife of a Dutch Boer, who was said to be very ill. I found my patient of the usual Dutch build, *informe ingens*, lying on a camp-bed in a little tent, where the heat was something terrific; a naked bush child trying to fan away the cloud of flies which was tormenting my poor patient, bound hand and foot, I may say every joint, in the cruel bonds of as fierce an attack of rheumatic fever as I ever saw. She was perspiring profusely. The time that has elapsed has obliterated my memory of pulse, temperature, and heart complication. I prescribed the usual alkaline mixture, with calomel and Dover's powder at bedtime, and rode away.

"Some two months after, my former patient entered my surgery, looking remarkably well, and I very naturally congratulated myself and her that she had recovered so completely. I was quite taken aback when she bluntly told me that my physic hadn't helped her a bit. On inquiring what had helped her, she said that the old Hottentot shepherd had made her a decoction of the shoots of the willows which grow on the banks of the river, and that after taking this for a few days she began to get better.

"Your papers in THE LANCET brought the picture of the stout Dutch woman back to my memory. I afterwards learned that a decoction of willow-tops is a favourite remedy for fever, and what the Boers and native Hottentots call 'sinken kors' or rheumatic fever.

"Trusting that this remedy which you have scientifically thought out may prove as beneficial as the 'willow-tea' selected by these children of nature, I remain yours very truly,

"FREDK. EVSON,

"Surgeon to Provincial Hospital, Port Elizabeth."

If what has already been published regarding the efficacy of salicin as a remedy for acute rheumatism should be confirmed by a more extended experience—as I have not the least doubt it will be,—it will form a curious commentary on our civilisation, and on the advance of medical science, that one of the most common and painful diseases of the civilised world should have remained one of the opprobria of medicine for many years after a remedy for it was known to the rude Hottentots of South Africa. Equally within the reach of both has ever been the means of cutting short the disease; but the untutored Hottentot shepherd used the proper means, while the accomplished European physician was trying this, that, and the other remedy, with results so unsatisfactory that he had almost given up the idea of ever being able to do more than watch the natural progress of the malady.

I hope to receive more detailed information of the Hottentot practice.

Your obedient servant,

Dundee, May 29th, 1876. T. MACLAGAN.

MIDWIFERY ENGAGEMENTS.

THE principle is recognised in law, though not always acted on by County Court Judges, that a medical man can claim a midwifery fee in virtue of his engagement to attend a confinement, even where he is not required to attend. But the engagement should be direct, at the hands of the patient or her husband. In the present case the engagement to attend was indirect, and therefore, we fear, not binding.

Mr. J. T.—The best French work (without plates) on Regional Anatomy is the Traité d'Anatomie Topographique Médico-Chirurgicale, 2nd edition, by J. E. Pétrequin, published by Victoire Masson in 1875. Dr. Le Gendre's work, entitled Anatomie Chirurgicale Homolographique, published by Baillière et Fils in 1858, contains a series of valuable plates (twenty-five in number) of plane sections of frozen bodies.

A Constant Reader.—1. The official regulations governing the appointment and detailing the duties of a medical officer of health may be obtained from Messrs. Knight and Co., publishers to the Local Government Board Fleet-street.—2. The salaries range from fees paid for particular services rendered and from a fixed sum of £10 to £800, including expenses.—3. The appointments number from 1100 to 1200.—4. The appointments are made by the local sanitary authorities, subject to approval by the Local Government Board, when that Board contributes half the salary.—5. A special diploma in State Medicine is given by the Dublin University, and a certificate is given by the University of Cambridge after special examination, open to all registered practitioners. For regulations as to the examinations at Dublin and Cambridge, see the Students' Number of THE LANCET. Chemistry for public health purposes may be specially studied at University College and in several private laboratories.

L.R.C.P.E.—Surely there can be no difficulty in making it up in the form of a mixture.

DELIVERY OF TWINS BY FORCEPS.

To the Editor of THE LANCET.

SIR,—The following case, I think, illustrates the advisability of the timely application of the forceps, as recommended by several speakers at the meeting of the Obstetrical Society on the 3rd inst., reported in your columns of the 27th.

On the 15th inst. I was called at midnight to a young woman, aged twenty-two years, in her first confinement. On arrival I was informed she had been in labour four hours. On making examination, I found the head low down, external to the os uteri, slight caput succedaneum, with sufficiency of space, and everything apparently going on as favourably as one could expect; but after an interval of three hours the pains, although tolerably strong, became futile, and of that peculiarly unsatisfactory character which can be better understood than described. I then applied the forceps, and delivered her with ease of a living male child. I then discovered, what I had already suspected, that there was a second one in utero. In about twenty minutes the pains returned, but not very strong. I gave two doses of ergot, which brought on more decided uterine action, and the head descended into the cavity of the pelvis; but at the expiration of an hour and a half from the birth of the first child the pains became futile, so that I again applied the forceps, and delivered the patient of a second male child. The mother and children did thoroughly well, and on the eighth day she was down stairs, looking none the worse, but probably very much the better, for the double delivery by forceps.

I may add that the patient lived five miles from my residence; but I make it a rule always to take forceps with me, having learned from experience the necessity of being so provided.

I am, Sir, your obedient servant,

Winchelsea, May 29th, 1876. ROBERT V. SKINNER.

CONVERSAZIONE AT THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE brief notice of this gathering in our last issue did not include the names of many gentlemen who contributed largely to the success of the meeting by the loan of valuable paintings, drawings, and other articles of *certu*. To the list then given may be added the names of Mr. Hyde Hills, Mr. W. Donald Napier, Mr. E. Saunders, Dr. W. Ord, Dr. Fitzpatrick, Dr. T. K. Chambers, and Mr. A. Hunt.

A Fourth-year's Student.—1. Bryant's or Erichsen's Surgery.—2. Roser's Surgical Anatomy.—3. Roberts's Medicine.—4. Garrod's Materia Medica and Therapeutics.

Dr. F. Lowndes.—We shall be glad to receive it.

MEDICAL RELIEF AS A LEGAL QUESTION.

To the Editor of THE LANCET.

SIR,—In a recent annotation on the subject "Medical Relief as a Legal Question," you say, "It is undoubtedly true that the present state of the law empowers a relieving officer to withhold nourishment ordered by the medical officer of the union." I do not like to question the accuracy of your exposition of the statute; but I have my misgivings. However, I think medical officers of unions ought to be reminded that the onus of refusing necessaries ordered by medical certificate in due form rests directly upon the relieving officer, and in the event of death he is liable to a charge of manslaughter. I have acted upon this construction of the law with the best practical results. After ordering necessaries, I have taken means to ascertain whether they have been supplied within a reasonable number of hours. In the event of refusal or delay, I have addressed a letter to the relieving officer in something like the following form:—

"*To the Relieving Officer of* ——,

"SIR,—I beg to give you formal notice that unless the 'necessaries' recommended by me for the relief of —— are supplied in full within —— hours, I shall hold you legally responsible for any ill-consequences which may result; and in the event of the death of the said ——, I shall refuse a certificate of the cause, and move the coroner to hold an inquest.

"I am, Sir, your obedient servant,

"MEDICAL OFFICER OF ——.

Or, "ACTING MEDICAL OFFICER FOR THE DISTRICT OF ——."

The effect has been a prompt compliance with the precise terms of the medical order. I do not think the law *does* empower a relieving officer to refuse necessaries. He must supply them until the next meeting of the Board of Guardians; but in any case the plan I have adopted is an easy way out of the difficulty, and discharges the onerous responsibility which undoubtedly rests on any medical officer who believes "necessaries" are absolutely required in the case for which he prescribes them.

I am, Sir, yours obediently,

June, 1876. ONE A POOR-LAW MEDICAL OFFICER.

F. S. A.—We believe that Messrs. Macmillan anticipate being able to publish in the autumn two volumes, comprising the results obtained by Dr. Wyville Thomson of the dredging of the Atlantic, illustrated from Mr. Wild's drawings. These volumes are to be followed by two others containing a record of the discoveries made in the Pacific.

TREATMENT OF SEVERE DYSENTERY.

DRS. MAURY, GAILLARD THOMAS, and DILLS, considering that in very intractable cases of dysentery the large intestine and the rectum are in a state of great irritation, the latter being the cause of the rectal tenesmus, have (says the *New York Medical Journal*) put the patient to sleep, and when quite narcotised introduced a speculum, by means of which the intestine was fully dilated. The mucous membrane was then superficially cauterised with nitrate of silver, carrying the latter as high as possible. During the following days carbolic acid, one to eight, was thrown up the bowel. Great improvement followed the cauterisation, tenesmus disappeared, the evacuations diminished in number, the appetite returned, and in five or six days the cure was perfect.

Mr. E. R. West.—We do not know of any such agent. Application should be made to the different Embassies.

STIMULANTS IN WORKHOUSES.

To the Editor of THE LANCET.

SIR,—My attention has been directed to an article which appeared in THE LANCET for the 20th of May, in which you comment upon some statements made by me in a letter to the Wrexham Board of Guardians.

I wish to say, in reply, that, though I fully believe and am quite prepared to sustain the general assertion of my letter, I am not responsible for the figures of the postscript, which were given me by Mr. Ralph, the master of the workhouse, and which I appended somewhat hurriedly without adding the explanations which are necessary to the comprehension of their import.

There are two facts material to the question which were not given in the table appended to Mr. Ralph's letter, but which I took into my calculation. The first is, that, owing to the recent prosperous state of trade, there was a considerable diminution in the number of able-bodied inmates in the house during the last three years referred to; and secondly, the guardians have during the same period boarded out all the *healthy* children above two years of age. Thus, though there has been really a smaller number of inmates in the house, that smaller number includes all the aged infirm and sick, together with all infants under two years of age. This will appear clear from an inspection of the accompanying table, the totals of which exactly correspond with those previously given. For this table I am indebted to Mr. Ralph; but I have taken the precaution to examine it for myself, and I can vouch for its correctness.

The number of deaths in 1875 was exceptionally great, but no inference unfavourable to the general or medical treatment can be inferred from this. Of the 44 who died, 6 averaged 85 and 5-6ths years; 11 averaged 74 and 1-11th years; 11 averaged 64 and 4-11ths years; 4 averaged 54½ years; and 4 were infants under 12 months.

As to the treatment of special diseases, it is not fair to compare the average deaths from such diseases in a workhouse with those which take place in the general community, and I am unwilling to make the comparison because I have no accurate record of the treatment of such diseases in the Wrexham Workhouse during the alcoholic period. From a careful attention to each case as it has arisen, I am confident that all these diseases can be dealt with without alcohol at least as effectually as with it.

Having proved that the disuse of alcohol has neither lessened the comfort of the inmates nor increased the death-rate, it is surely not an immaterial circumstance that the guardians have saved £100 a year by the new treatment.

I am, Sir, yours truly,

Plas Darland, Wrexham, May 29th, 1876. EDWD. DAVIES, M.D.

*** We cannot admit that Dr. Davies has yet proved that the disuse of alcohol has neither lessened the comfort nor increased the death-rate of the workhouse. The tables which he sends us are not the same as the last, and omit some particulars of great interest which were given in them. We should be sorry to discourage any reasonable and kind disuse of alcohol. On the other hand, we should be sorry to have an iron rule of prohibition applied to paupers in cases where alcohol would certainly be used if the patients were not paupers, and could command the best advice.—ED. L.

To the Editor of THE LANCET.

SIR,—I have just read an article of yours in your number for May 20th on the subject of "Stimulants in Workhouses." I enclose a slip cut out of our local papers, giving a short speech of one of the guardians upon the subject. You will see by that the quantity administered during the last ten years in the Chester Union Workhouse. I have been medical officer to that institution for thirty-five years, and I can say that what he asserts with regard to the last ten years will apply equally to the whole time of my connexion with the house. The not giving of stimulants by me has not been in the way of experiment, but from conviction that they were not needed. During the thirty-five years we have had in the house all sorts of cases—typhus, typhoid, &c. &c.,—and my treatment has been to administer full quantities of nutritious food, beef-tea, rice, milk, roast and boiled beef, mutton, &c., and, when stimulants were required, camphor, ammonia, &c., and I am happy to say I have never had occasion to regret what I have done.

Your obedient servant,

Chester, June 6th, 1876. T. BRITTAIN, F.R.C.S., &c.

The following is the speech referred to by our correspondent:—

"Mr. J. Robertson said he had seen so much lately in the London and provincial papers as to the amount expended on intoxicating stimulants that he had asked Mr. Aldis to draw him up a statement as to the cost of wines and spirits used in the workhouse during the past ten years, feeling assured that the Chester Union would compare favourably in that respect with other unions. The amount expended during the past ten years on those stimulants was £9 17s. 6d., the highest amount in any one year being £1 16s. 10d., and the lowest 1s. He thought there was no other union in the kingdom which could show a more favourable return."

PROVIDENT DISPENSARIES.

Mr. Thomas Horsley.—The best way to study the working of such institutions would be to ask the Secretaries of the chief of them for Reports and Rules, such as the one in Northampton, the Haverstock-hill Provident Dispensary, and the Camberwell one. An account of the Northampton Dispensary will be found in THE LANCET of March 9th, 1875.

Chirurgus Copiarum (St. Andrews, N.B.) had better consult Count de Reincourt's work, "Des Militaires Blessés et Invalides, leur Histoire leur Situation." The historic summary which the author carries up to the Merovingian Kings, treats of the care bestowed from that epoch downwards on the sick and wounded in war. He makes the instructive remark that before the use of firearms but few soldiers were mutilated. Cold steel kills and wounds, but those whom it wounds are seldom mutilated. Gunpowder has brought in quite another feature among the wounded in war. The entire work is well worth perusing, particularly so in all that relates to the French treatment of the sick and wounded in the recent campaigns of which Count de Reincourt was an eye-witness.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to say a few words in answer to your correspondent, "A Disgusted Young Surgeon." I should like to know why he assumes that the unqualified assistant he speaks of has never attended any hospital or medical school. Let me tell him that, as a rule, medical men on engaging an assistant require to know what medical school he attended, and also expect the highest references as to moral character and general capacity. Hence it is most unlikely that any man who has not regularly attended his lectures, operations, and so forth, would obtain employment as assistant from a qualified practitioner of any standing. I would also ask you, Sir, what is to become of those unfortunate men who, like myself, have been articled for three years, and have attended the hospitals for the prescribed time, and then from some unforeseen cause have not the money, although they may have the brains, to qualify? They can do nothing else! It is impossible for them to recommence life in any other profession. They must be either unqualified assistants, or have recourse to manual labour for a bare subsistence. As regards the salary, any unqualified assistant who is worth his salt can command £120 out-doors or £50 in-doors; at least that is my experience. Again, a man in general practice would rather engage a good unqualified assistant than a young fellow just qualified, fresh from the hospitals, who can hardly diagnose small-pox from chicken-pox, or scarlatina from measles.

Wishing that some more able pen than mine had been stirred up to espouse our cause,

I am, Sir, yours &c.,

London, May 31st, 1876. UNQUALIFIED ASSISTANT.

To the Editor of THE LANCET.

SIR,—The acrimonious spirit conveyed in the remarks of "A Disgusted Young Surgeon" in your issue of May 27th deserves to be passed over in silence; but I think he may blame his brother qualified men for offering the miserable salaries that appear in the medical journals. I have been an unqualified assistant for upwards of twenty years, during which period I have on three occasions received three testimonials from upwards of a thousand patients. I have also personally attended more than 900 cases of midwifery. True, I am unqualified; but it cannot be denied that great experience must have been acquired during that period. Will "A Disgusted Young Surgeon" point out a more ungenerously treated class of men than assistants? Can he forget how painfully the term "assistant" has been ironically applied to chafe the spirit of the "wretched assistant" (possibly the son of a medical man), and is it not a fact that they are banished from the employers' circle, and, I may literally add, daily made to feel the sting of their position? Legally, their position is to a certain extent untenable; but I will venture to affirm that there is many a practitioner at the present time who, after a long series of years passed faithfully in his service by his unqualified assistant, would regret to lose him.

I fear your correspondent is disappointed at the district where he is located, and, if patients are somewhat scarce, I am sorry he has shown his ire against "the wretched assistant." For his information, then, I will inform him it is in contemplation to form an Association for the purpose of improving the position of an assistant &c., when I hope to enlist the sympathies of the profession on our behalf.

Yours truly,

London, May 30th, 1876. AN ASSISTANT.

PHARMACIENS AT THE PARIS HOSPITALS.

THE appointments of resident apothecaries of the Paris hospitals are given by competition. A proof that those places are much coveted is found in the fact that a short time ago no less than 126 candidates presented themselves for 35 appointments. The names of the successful men have been published in order of merit.

An Intending Visitor.—It has been announced that the Exhibition of Hygiene at Brussels will be opened on the 26th instant.

Mr. Nettleship is thanked.

TREATMENT OF CORYZA.

To the Editor of THE LANCET.

SIR,—I have waited till now in the expectation that some notice would be taken of Dr. Ferrier's discovery in the treatment of coryza, either of its being accepted as something new, or recognised as an "old friend with a new face." As an instance of "how they manage these things better in France," I beg to transcribe the formula of a powder which was commonly sold for the above-mentioned complaint in Dr. Mialhe's pharmacy, in which I was an assistant eighteen years ago:—"Poudre contre la coryza: Sous-nitrate de bismuth, 100; sucre en poudre, 100; calomel, 15. Mêlez exactement."

Yours faithfully,

Aberdeen, June 8th, 1876. JAMES HUNTER.

Mr. H. E. Myers writes from Cologne on this subject as follows:—

"On my arrival here I was attacked with a violent cold, constant sneezing, running at the nose and eyes, dry skin, &c. Thinking it a good opportunity to try the bismuth snuff, as recommended by Dr. Ferrier in a late number of THE LANCET, I prepared some of it according to his formula, and commenced using it. After three or four "pinches" I found no further necessity for it; for my cold left me in a really marvellous manner, and has not returned since. I have been in the habit of using powdered camphor for the same purpose, but this bismuth powder entirely supersedes it. I think this one worthy of record, as showing the really specific action of bismuth in colds."

A UNIQUE REPORT.

THE following report was lately sent in to the chief surgeon of a district in India by a native Indian practitioner, a "hospital assistant" of the first class, in receipt of salary from Government:—

"Herewith I beg to send you the list of diseases in the following manor. Remitant fever, B. Ague, Cholera and a Rheumatism. These were the chief sickness in the last year, which were caused by the Rainy Season, converting miscellaneous Nullah and petty Rivers which surrounded the district, and likewise the dampness impaired the atmosphere, which circulated its district, which had caused to suffer the men to be effected with logs of the above: While the all other diseases were slightly decreased. 6 Fractures Simple occurd, 2 Two Fractures, one of tibia and other of leg were treated. Among the Indoor patient 7 Seven of them received a perfect recovery, others absconded himself. Five Fractures Simple occurd outdoor. Two of them were perfectly cured, and the others were absent themselves. Two patients of Pernatious Indoor died for weak health. Outdoor 4 Four cases of Cholera and one Phithisis Pulmonalis and Syncope were expird, please note."

POLLUTED WELLS IN THE CITY.

To the Editor of THE LANCET.

SIR,—With reference to a paragraph in your issue of the 3rd instant relating to my official action in the matter of impure water from a well on the premises of Messrs. Cassell, Petter, and Galpin, I shall feel obliged if you will allow me to state that, upon learning the result of the several analyses made by me of the said water, the firm afforded me every assistance, and gave their prompt assurance that the well should no longer be used for drinking or cooking purposes. The extract from my report to the Commissioners of Sewers was entirely unauthorised.

I am, Sir, your obedient servant,
WM. SEDGWICK SAUNDERS.

Queen-street, Cheapside, June 14th, 1876.

*** The "extract" in question was published in the newspapers. We simply reproduced it.—ED. L.

MONEY-LENDERS.

To the Editor of THE LANCET.

SIR,—I omitted to say that in all the cases referred to in my letter the applicants, although fulfilling all the conditions required by the so-called money-lender, failed to obtain any money.—Yours &c.,
Trinity-square, S.E., June 10th, 1876. DANIEL HOOPER, M.B.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Hutchinson, London; Dr. Grally Hewitt, London; Dr. Sedgwick Saunders, London; Mr. Macnamara, London; Lord Francis Hervey, London; Dr. Charteris, Glasgow; Dr. Senfticben, London; Mr. Crook; Dr. Alcock, Aldershot; Dr. H. Snow, London; Dr. Hooper, London; Mr. Cardwell, Liverpool; Mr. Logg, Hurdoi; Dr. Agnew, Tasmania; Mr. Youldon, London; Mr. Rhodes, Weymouth; Mr. Jenkins, Salford; Mr. Ingpen, London; Dr. Hamilton, New York; Miss Bengough, Hemingley; Mr. Foebroke, Birmingham; Mr. Cody, Bombay; Mr. Evans, London; Mr. Vincent, Blackpool; Mr. Bowes, Crawley; Mr. Tait, Birmingham; Mr. R. Davey, London; Dr. Bucknill, Ballina; Mr. A. Pollock, London; Mr. Morris, Swansea; Mr. E. Cheshire, Birmingham; Dr. Malins, Birmingham; Mr. Ashby, Grantham; Dr. Russell, Glasgow; Mr. Chapman, Ludham; Mr. Rhodes, Huddersfield; Mr. Kempe, London; Mr. Biggs, Salisbury; Dr. Dowse, Highgate; Mr. Kershaw, London; Mr. Wyman, London; Dr. Philipson, Newcastle-on-Tyne; Mr. Taylor, Glasgow; Mr. Aitkin, Edinburgh; Mr. West, Dawlish; Dr. Dudfield, Kensington; Mr. Hyde; Dr. Milne, Accrington; Mr. Dalby, London; Mr. A. Goodall, London; Mr. Hill, Douglas; Mr. H. R. Lewin, Oldham; Mr. Herbert, London; Mr. Crowe, Chatham: Dr. Spencer, Preston; Mr. Moore, Thrapstone; Mr. Salmon, London; Mr. Creaton, Bedford; Dr. Spender, Bath; Mr. Underwood, London; Dr. Long, Ipswich; Mr. Gibson, London; Mr. Leaf, Oxford; Mr. Graham, Sutton; Mr. Jones, Uppingham; Mr. Ford, Chatteris; Mr. Reid, Glasgow; Mr. Porter, Boulogne; Dr. Law, London; Mr. Witherley, London; Mr. Hunter, Aberdeen; Dr. Crowther, London; Dr. Moxhay, Reading; Mr. Blower, Bedford; Mr. Edwards, Frome; Mr. W. Peters, Stirling; Mr. Stephenson, Coleford; Mr. H. Chaloner, Bristol; Mr. Burton, Truro; Mr. Slater, Leicester; Mr. R. S. Watson, Hungerford; Mr. Mulvany, Bristol; Mr. Higgins, London; Mr. Bailey, Dublin; Mr. Howley, St. John's, Newfoundland; Mr. Macpherson; Mr. Brennan; Statim; A Metropolitan Guardian; Justice; M. B. L.; Observer; P. G., Watford; J. F. C.; L.R.C.P. Edin.; G. B.; Junior Medicus; A. B.; W. J.; Undergrad.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. M'Clure, Worle; Mr. Goodman, Stroud; Dr. Atthill, Dublin; Dr. Fisher, Dorking; Mr. Kennedy, Leeds; Mr. Beale, San Francisco; Mr. Walker, Corwen; Miss Whitton, Blackburn; Dr. Eberle, Easingwold; Dr. Young, Yarm; Dr. Blythman, Swinton; Mr. Evans, Seaford; Mr. Woolley, Heanor; Mr. Hall, Derby; Dr. Bird, Wellingborough; A. B. G.; Z., Brompton; Omega; Medicus, Barnsley; Beta; Juvenis, Cambridge; Delta, Paris; Alpha, Manchester; Confidence; Delta, West Bromwich; X. Y. Z., Devonport; W. C. A., Greenock; Medicus, Aylesbury; H. C., Hereford; Alpha, Wragby; Surgeon, Tring; W. 391; A. B., Upper Norwood; M.D., London; Medicus, South Kensington; B. H., Islington; Medicus, Aberdeen; Delta, Hackney; M.R.C.S., Holloway.

Hastings and St. Leonard's Observer, Western Morning News, East London Observer, Newcastle Chronicle, Surrey Advertiser, Essex Newsman, Record, Guernsey Mail, Comet, Manchester Guardian, Cork Constitution, Liverpool Post, and *Hampshire Independent* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, JUNE 15TH, 1876.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
June 9	29·73	N.E.	50	53	74	60	51	...	Overcast
„ 10	30·13	N.E.	49	55	95	61	51	...	Cloudy
„ 11	30·14	N.E.	50	58	104	73	44	...	Fine
„ 12	30·07	N.W.	58	65	114	81	51	...	Hazy
„ 13	30·05	N.	54	60	76	67	60	...	Raining
„ 14	30·07	W.	53	58	106	70	51	0·13	Fine
„ 15	29·93	S.W.	54	61	...	...	49	...	Cloudy

Medical Diary for the ensuing Week.

Monday, June 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Wm. Turner, "On the Comparative Anatomy of the Placenta."

Tuesday, June 20.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, June 21.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Wm. Turner, "On the Comparative Anatomy of the Placenta."

Thursday, June 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, June 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Wm. Turner, "On the Comparative Anatomy of the Placenta."

Saturday, June 24.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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